Cotswold Archaeology

# Archaeological Resource Assessment of the Aggregate Producing Areas of Wiltshire and Swindon

*for*

**English Heritage**

CA Project: 3066
CA Report: 10231

October 2011

# ARCHAEOLOGICAL RESOURCE ASSESSMENT OF THE AGGREGATE PRODUCING AREAS OF WILTSHIRE AND SWINDON

CA PROJECT: 3066
CA REPORT: 10231

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**CONTENTS**

1. INTRODUCTION ..... 8

*Background ..... 8*

2. AIMS AND OBJECTIVES ..... 10

*Project Aim ..... 10*
*Project Objectives ..... 10*

3. METHODOLOGY ..... 11

*Project partners ..... 11*
*Defining and Characterising the Aggregates Resource – Objective 1 ..... 11*
*Defining the Archaeological Resource – Objective 3 ..... 13*
*Monument Densities – Objective 3 ..... 14*
*Research Agenda and Strategy – Objective 3 ..... 15*
*Mitigation, Methodological and Strategy Review – Objective 4 ..... 15*
*Previous Aggregate Investigation – Objective 5 ..... 15*
*Outreach – Objective 7 ..... 15*
*Data Archiving ..... 16*
*HER Data Enhancement ..... 16*
*The Mineral Development Framework - Objective 8 ..... 16*

4. DESCRIPTION OF AGGREGATES RESOURCE ..... 17

*Introduction ..... 17*
*Past and present extraction ..... 17*
*Future Extraction ..... 24*
*Aggregate Character Areas ..... 26*
*Sharp Sand and Gravel ACA ..... 26*
*Soft Sand ACA ..... 27*
*Crushed Rock ACA ..... 27*

5. DESCRIPTION OF THE ARCHAEOLOGICAL RESOURCE ..... 27

*Summary of previous archaeological works ..... 27*
*Introduction ..... 28*
*Monument Density ..... 28*
*Designated Sites ..... 31*
*Palaeolithic (c. 900,000 BC to 10,000 BC) ..... 33*
*Mesolithic (c. 10,000 – 4,000 BC) ..... 39*

*Neolithic (c. 4,000 BC to 2,500 BC)* ..... *46*
*The Bronze Age (c. 2,500 BC to 800 BC)* ..... *59*
*The Iron Age (c. 800BC – AD43)* ..... *73*
*Roman (AD 43 – c. AD 410)* ..... *84*
*Early medieval (410-1066 AD)* ..... *95*
*Medieval (1066-1540 AD)* ..... *101*
*Post-medieval (1540-1900)* ..... *107*
*Introduction and Chronology* ..... *107*
*Modern 1900-2000* ..... *119*
*Introduction and Chronology* ..... *119*
*Summary of the Archaeological Resource* ..... *123*

6. MANAGEMENT OF THE ARCHAEOLOGICAL RESOURCE ..... 127

*Mitigation, Methodological and Strategy Review* ..... *127*
*Previous impact of aggregate mineral extraction on the archaeological resource* *143*
*Review of Old Mineral Permissions (ROMPs)* ..... *143*
*Investigation/ Mitigation* ..... *144*

7. RESEARCH FRAMEWORK AND AGENDA ..... 144

*Period-based research agenda* ..... *144*
*Research Strategy* ..... *163*

8. CONCLUSIONS ..... 165

9. REFERENCES ..... 167

APPENDIX A: AGGREGATES DATABASE FIELDS ..... 184

APPENDIX B: WHER PERIOD ..... 185

APPENDIX C: WHER METHODOLOGY ..... 186

APPENDIX D: SITES PROPOSED FOR ALLOCATION IN THE AGGREGATE MINERALS SITE ALLOCATIONS DEVELOPMENT PLAN DOCUMENT ..... 187

APPENDIX E: SEMINAR TIMETABLE AND ATTENDANCE LIST ..... 188

## LIST OF ILLUSTRATIONS

Fig. 1 Wiltshire
Fig. 2 Topography
Fig. 3 Known and Potential Aggregate Extraction Sites
Fig. 4 Thames Valley Quarries
Fig. 5 Aggregate Resource: Drift Geology
Fig. 6 Aggregate Resource: Solid Geology
Fig. 7 Aggregate Character Areas
Fig. 8 Aggregate Sub-Areas
Fig. 9 Designated sites within the ACAs
Fig. 10 Palaeolithic
Fig. 11 Mesolithic
Fig. 12 Neolithic sites
Fig. 13 Neolithic finds
Fig. 14 Bronze Age features
Fig. 15 Bronze Age finds
Fig. 16 Bronze Age barrows
Fig. 17 Iron Age
Fig. 18 Roman settlement and roads
Fig. 19 Roman religion and industry
Fig. 20 Roman finds
Fig. 21 Early medieval
Fig. 22 Medieval: all WHER sites
Fig. 23 Medieval: Castles and Manorial sites
Fig. 24 Medieval: Settlement
Fig. 25 Medieval: Ecclesiastical Sites
Fig. 26 Medieval: Industrial Sites
Fig. 27 Post-medieval Structures and earthworks
Fig. 28 Post-medieval Industrial sites and watermeadows
Fig. 29 Post-medieval Canals and Railways
Fig. 30 19th-century landscape zones
Fig. 31 Modern

## LIST OF TABLES

Table 3.1 GIS files provided by the MPA
Table 4.1 Quarries exploiting Thames Valley deposits
Table 4.2 Quarries exploiting deposits associated with the Bristol Avon
Table 4.3 Quarries exploiting deposits associated with the River Kennet
Table 4.4 Quarries exploiting deposits associated with the Salisbury Avon
Table 4.5 Quarries exploiting deposits associated with the River Test
Table 4.6 Quarries exploiting Lower Greensand deposits
Table 4.7 Quarries exploiting Upper Greensand deposits
Table 4.8 Quarries exploiting Reading Beds/Lambeth Group Deposits
Table 4.9 Quarries exploiting Bagshot Beds/Bracklesham Group Deposits
Table 4.10 Quarries exploiting the Hazelbury Bryan Formation
Table 4.11 Quarries producing crushed rock aggregate (Limestone)
Table 4.12 Preferred Areas
Table 5.1 Monument Density for HER sites in Wiltshire and the Aggregate Character Areas
Table 5.2 Comparison of MARS/WHER record density
Table 5.3 Designated Sites within the Land Based ACA
Table 5.4 Chronology for the Lower, Middle and Upper Palaeolithic
Table 5.5 Monument Density: Palaeolithic
Table 5.6 Monument Density: Mesolithic
Table 5.7 Monument Density: Neolithic

Table 5.8 Monument Density: Bronze Age
Table 5.9 Monument Density: Iron Age
Table 5.10 Monument Density: Roman
Table 5.11 Monument Density: Early medieval
Table 5.12 Monument Density: Medieval
Table 5.13 Monument Density: Post-medieval
Table 5.14 Monument Density: Modern
Table 5.15 Summary of the archaeological resource
Table 6.1 Summary of archaeological works relating to aggregate extraction
Table 6.2 Status of Dissemination

**LIST OF GRAPHS**

Graph 5.1 Monument Densities for Wiltshire and Swindon and the Aggregate Character Areas
Graph 5.2 Monument Density: Palaeolithic
Graph 5.3 Monument Density: Mesolithic
Graph 5.4 Monument Density: Neolithic
Graph 5.5 Monument Density: Bronze Age
Graph 5.6 Monument Density: Iron Age
Graph 5.7 Monument Density: Roman
Graph 5.8 Monument Density: Early medieval
Graph 5.9 Monument Density: Medieval
Graph 5.10 Monument Density: Post-medieval
Graph 5.11 Monument Density: Modern

**GLOSSARY**

ACA Aggregate Character Area
ADS Archaeology Data Service
ALSF Aggregates Levy Sustainability Fund
AMIE Archives and Monuments Information England
AS-A Aggregate Sub-Area
BGS British Geological Survey
DPD Development Plan Document
EH English Heritage
MPA Minerals Planning Authority
PAS Portable Antiquities Scheme
SQL Structured Query Language
SWARF South West Archaeological Research Framework
UA Unitary Authority
WHER Wiltshire and Swindon Historic Environment Record

## EXECUTIVE SUMMARY

An Archaeological Resource Assessment of the Aggregates Producing Areas of Wiltshire and Swindon was undertaken by Cotswold Archaeology in 2010 and 2011. The project was funded by English Heritage, through the Aggregates Levy Sustainability Fund (ALSF). It is one of a number of similar projects summarising the aggregate resource of counties and unitary authorities, including Gloucestershire, Somerset, South Gloucestershire and Warwickshire.

The project mapped the potential aggregate producing areas of Wiltshire and Swindon, dividing the resource into three Aggregate Character Areas (Sharp Sand and Gravel, Soft Sand and Crushed Rock), and further aggregate sub-areas. These areas defined the project 'study area'. The Sharp Sand and Gravel deposits broadly comprise the major river valleys such as the Thames, Salisbury Avon, Bristol Avon, the Kennet and the Stour. The Soft Sand deposits are found across the county, whilst the Crushed Rock deposits comprise limestone deposits in the north-west.

The Palaeolithic and Mesolithic are generally represented by a low number of stray finds found across the study area, although nearby sites such as Harnham have highlighted the fact that in situ early prehistoric material may still occur within the aggregate resource. Elements of highly significant Neolithic monumental complexes such as Avebury, Stonehenge and Marden lie within the study area, although investigations prior to aggregate extraction have also identified Neolithic ritual monuments beyond these well-documented landscapes.

Bronze Age sites are the most prolific prehistoric monuments within the study area, primarily because of the widespread distribution of barrows and ring-ditches. Archaeological investigations prior to aggregate extraction in the major river valleys, particularly the Thames, have identified whole landscapes of Late Bronze Age and Iron Age date. There were no Roman *civitas* capitals or *coloniae* in Wiltshire, although several small towns lie within the study area and there is a large amount of evidence for rural settlement. Beyond the river valleys numerous villa settlements have been identified, whereas in the river valleys there is evidence for Roman intensifcation of the agricultural landscape. Evidence from sites such as Latton Lands indicate that large areas of Roman, and earlier, landscapes may potentially be masked by later deposits of post-Roman alluvium.

There is generally little evidence for early medieval settlement although where recorded this has come from existing villages or through archaeological excavation in rural contexts. Settlement patterns were consolidated in the medieval period and this is commonly reflected in current landscapes within the study area, where deserted medieval settlements are recorded along with evidence for former open field agriculture. Remains from the post-medieval and modern periods are widespread and well-preserved within the study area, with many more surviving types of evidence than preceding periods, and particularly significant examples may comprise designated heritage assets.

An important result of archaeological investigations upon the aggregate producing areas, especially with regard to prehistoric studies, has been the realisation that sites may not always contain the remains that archaeologists expect from the existing evidence base. Such unexpected finds can provide essential information for areas of prehistoric studies for which there is currently little evidence to interpret. This is related to a wider point that since the inception of PPG16 in 1990 evaluations and excavations upon the aggregates resource have produced some of the most consistently informative results in the county.

This assessment, and the seminar held on 22 June 2011, have completed the objectives detailed in section 1.3, with the exception of Objective 8. The assessment was unable to

inform the Minerals Development Framework to the degree anticipated, as documents were adopted prior to the completion of this study. A number of key research aims have been identified by the study, which would be of great benefit to the study and preservation of the archaeological resource of the aggregates areas for the coming years.

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Thanks also to Mark Henderson, Senior Planner, Minerals & Waste Policy, Wiltshire Council, for providing information and documents relating to aggregate extraction in Wiltshire and Swindon. Thanks also to the staff at County Hall and the Bradley Road offices for their assistance in obtaining planning documents.

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The report was produced by Cotswold Archaeology (CA). The Project Executive was Neil Holbrook, CA Chief Executive. The project was managed by Gail Stoten, CA Principal Consultancy Manager and Richard Morton, Consultancy Project Manager. The project was researched by Rosemary Blackwell, CA Research Officer, Nathan Blick, CA Assistant Research Officer and Peter Davenport, CA Senior Historic Buildings Officer. The report was produced by Rosemary Blackwell, Nathan Blick and Gail Stoten. Professor Stephen Rippon, Professor Tim Darvill, Melanie Pomeroy-Kellinger (Wiltshire County Council County Archaeologist) and Mark Henderson (Senior Planner, Minerals and Waste Policy, Wiltshire County Council) reviewed and contributed to the description of the archaeological resources and the Research Framework and Agenda. Illustrations were prepared by Lorna Gray, CA Illustrator, Rosemary Blackwell and Nathan Blick.

# 1. INTRODUCTION

1.1 This project is an archaeological resource assessment of the aggregate mineral producing areas of the Unitary Borough of Swindon and the Unitary Authority of Wiltshire, funded via the Aggregates Levy Sustainability Fund. It is one of a number of similar projects summarising the aggregate resources of counties and unitary authorities, such as South Gloucestershire, Warwickshire and Gloucestershire.

1.2 The Project Design for this project (CA 2010) was developed during discussions with Melanie Pomeroy-Kellinger, Wiltshire Council County Archaeologist, Sarah MacLean, HER Development Officer, and Mark Henderson Wiltshire Council Senior Planner, Minerals & Waste Policy. It was approved by English Heritage in March 2010.

## Background

### *Wiltshire and Swindon*

1.3 The ceremonial county of Wiltshire comprises the Unitary Authority (UA) of Wiltshire and the Unitary Authority of Swindon (Fig. 1), administered by Wiltshire Council and Swindon Borough Council respectively. Swindon UA is 229km$^2$ in area and Wiltshire UA is 3248km$^2$ in area, giving a combined total of 3477km$^2$. Swindon UA is bounded to the south and west by Wiltshire UA, and to the north and east by Gloucestershire and Oxfordshire respectively. Wiltshire is bounded to the north-east by Swindon UA, to the east by West Berkshire and Hampshire, to the south by Dorset, to the west by Somerset, Bath and North East Somerset (BANES) and South Gloucestershire, and to the north by Gloucestershire. Unless indicated otherwise, in this report 'Wiltshire' refers to both Wiltshire UA and Swindon UA collectively.

*Topography and geology*

1.4 Wiltshire is a county of chalk downlands, river valleys, clay vales and limestone hills. The underlying geology of the central, southern and eastern areas of the county is chalk, making up the down landscapes of the Marlborough Downs, Salisbury Plain, the West Wiltshire Downs and Cranbourne Chase (Fig. 2). The limestone hills of the Southern Cotswolds extend into the north-western area of the county. The largest of the clay vales is the Avon Vale, which cuts across the north-western area of the county between the Cotswolds and the chalk downland. The Vale of Pewsey divides the Marlborough downs from Salisbury Plain, and the Vale of Wardour runs south-west/north-east in the south-western area of Wiltshire. The major river systems of the county comprise: the Upper Thames in the north; the Bristol Avon in the north-west; the Kennet in the north-east; and the Salisbury Avon and its tributaries, the Nadder, the Wylye, the Bourne and the Ebble, in the south (Fig. 2).

*Current Settlement Patterns*

1.5 The most intensive settlement is mainly distributed in the northern and western areas of the Wiltshire, with Swindon the largest urban area. Other sizeable settlements include Chippenham, Trowbridge and Salisbury (Fig. 1).

*Roads and Railways*

1.6 The northern area of Wiltshire is crossed east-west by the M4 Motorway. Major A-roads crossing the county north-south include, in the west, the A429 and the A350, and in the east, the A419, A346 and A338. The A303 and the A36 cross approximately south-west/north-east and north-west/south-east through the

southern area of the county respectively (Fig. 1). Mainline Railways include the Great Western main line, which runs from London to South Wales via Swindon, and the Wessex main line, from Bristol to Southampton, via Salisbury (Fig. 1).

### *Minerals Planning Context*

1.7 Policies relating to mineral extraction in Wiltshire are detailed in the *Wiltshire and Swindon Minerals Core Strategy* (adopted June 2009) and the *Wiltshire and Swindon Minerals Development Control Policies Development Plan Document* (adopted September 2009), produced jointly by Wiltshire Council and Swindon Borough Council. It is currently forecast that Wiltshire (including Swindon) will need to produce 1.85 million tonnes of sand and gravel per annum up to 2016, with production beyond 2016 less certain but currently forecast at similar levels (although at the time of writing (March 2011) these figures are due to be published in revised form). In order to meet these requirements it is anticipated that it will be necessary to expand to sites currently without planning permission in the Upper Thames Valley prior to 2016, and also to explore alternative production areas for sharp sand and gravel and soft sand prior to 2026 (WC & SBC 2009, 23, 15, 24, 51). The *Initial Site Options Report for the Wiltshire and Swindon Aggregate Minerals Site Allocations DPD* (Development Plan Document) was released for consultation in August 2010, with responses required by 31 October 2010. The initial site options will be subject to further assessments and evidence gathering, after which a list of preferred sites (expected to be significantly less than the 62 site options originally consulted on) will be prepared and consulted on in June 2011.

### *Archaeological context*

1.8 The Wiltshire and Swindon Historic Environment Record (HER), curated by Wiltshire County Archaeology Service, contains considerable information on archaeological sites, monuments, buildings and historic landscapes within Wiltshire, comprising 21,000 records. At the time of producing this report the resource included AutoCAD data on the above resources, as well as an extensive library of grey literature covering developer-funded archaeological works.

1.9 Whilst the HER includes cultural heritage information for aggregate producing areas of Wiltshire, it was recognised that there was a need for a project providing a critical analysis of the recorded archaeological resource in these areas in order to provide baseline information to inform the management of the historic environment. This project will assist in the formation of appropriate management responses to future applications, and act as a gateway to the previous work that has been undertaken in these areas.

### *Aggregates Levy Sustainability Fund*

1.10 This is a project funded via Theme 1.1 (Quarries) of the English Heritage Aggregates Levy Sustainability Fund (ALSF) funding priorities, that seeks to identify and characterise the historic environment in key existing or potential areas of terrestrial extraction. This project is proposed in order to fulfil the need identified above for a critical analysis of the aggregate producing areas of Swindon and Wiltshire (hereafter 'the study area'). It will inform future decision making within minerals planning on the preservation, management and investigation of archaeological sites, monuments, built heritage and historic landscapes affected by aggregate extraction.

1.11 The proposed Aggregates Resource Assessment will contribute to a growing number of such resources funded through the ALSF, including those for South

Gloucestershire; Gloucestershire; Somerset; Bath and North East Somerset; Warwickshire; Worcestershire and West Berkshire.

### *SHAPE Sub-Programmes*

1.12 In 2008 English Heritage published *SHAPE, a Strategic Framework for Historic Environment Activities and Programmes in English Heritage* as guidance for external grant applicants.

1.13 The project contributes to two SHAPE Sub-Programmes. Firstly Sub-Programme 11172.110: Supporting Research Frameworks: National, regional, local, diachronic and thematic frameworks (Annex 1). This project places the archaeological resource within the context of the Regional Research Framework, *The Archaeology of South-West England* (Webster 2007), and also local frameworks including *Thames Through Time (Booth et al. 2007, and 2009)*, both of which have been supported by English Heritage. A research agenda for the aggregate producing areas of Swindon and Wiltshire has been produced, which sought to develop agenda items within the Regional Research Framework.

1.14 The project also contributes to Sub Programme 32142.210: Heritage at Risk: Identifying threats (other than climate change) and developing responses (Annex 1). This will be achieved as the project has identified areas of potential future mineral extraction, where extraction might threaten cultural heritage resources. It will also provide baseline data, a research agenda and a review of previous methodologies, in order to facilitate informed responses by the mineral planning authority and their advisors, both by planning for future extraction, and through the formulation of effective evaluation and mitigation strategies for proposed extraction works.

### *Interfaces*

1.15 As well as the interfaces with *The Archaeology of South-West England* (Webster 2007), and *Thames Through Time*, mentioned above, the project will also contribute to future Environmental Statements and Desk-Based Assessments produced as part of the development control process. The project should be viewed alongside other Aggregate Resource Assessments, including those in the surrounding counties of Gloucestershire, South Gloustershire, Bath and North-East Somerset, Somerset, and Hampshire.

## 2. AIMS AND OBJECTIVES

### Project Aim

2.1 To characterise the archaeological resource in aggregate producing areas of Wiltshire and Swindon and formulate a research agenda in order to aid the archaeological management and mitigation of future extraction proposals.

### Project Objectives

2.2

- Objective 1: Define all past, present and potential areas of aggregate production in Wiltshire and Swindon;
- Objective 2: Assess the current state of knowledge about the archaeological resource within the study area and produce a resource assessment;

- Objective 3: To identify gaps in current knowledge and produce an archaeological research agenda for the study area;
- Objective 4: Review and assess the methodologies and policies adopted in the archaeological evaluation and mitigation of planning applications for mineral extraction;
- Objective 5: To identify where previous archaeological investigations related to aggregate extraction have not yet been adequately published;
- Objective 6: Identify outstanding ROMPs (Review of Old Minerals Permissions) within the study area and assess the likely archaeological effects of continuing or starting extraction at these sites;
- Objective 7: To increase public, industry and other stakeholders' awareness and understanding of the historic environment within the study area; and
- Objective 8: To inform the preparation of the Mineral Development Framework and the evidence base for assessing the potential impact for future extraction sites.

## 3. METHODOLOGY

3.1 The project methodology was based upon that given in the Project Design (CA 2010), which was formulated during discussions with Buzz Busby, the English Heritage National Terrestrial Aggregates Advisor. This methodology is described below, together with explanations of the minor deviations from the anticipated methodology which occurred.

### Project partners

3.2 During the course of the project, discussions relating to the archaeological resource were held with Wiltshire Council Archaeology Service, namely Melanie Pomeroy-Kellinger, County Archaeologist, Sarah MacLean, HER Development Officer, David Vaughan, Assistant County Archaeologist and Clare King, Assistant County Archaeologist. They provided HER records and data for monument densities, information on previous archaeological works associated with aggregate extraction as well as general guidance relating to the archaeological resource of Wiltshire and Swindon.

3.3 Information and guidance was also supplied by Mark Henderson, Wiltshire Council Senior Planner, Minerals & Waste Policy. Mr Henderson provided GIS data relating to quarry sites, site-specific documents and information relating to areas of past, current and future aggregate extraction.

### Defining and Characterising the Aggregates Resource – Objective 1

3.4 The aggregate producing resource was defined and characterised by identifying previously exploited geologies, and mapping their extent.

#### *Geological mapping*

3.5 Digital geological mapping at 1:50,000 scale was purchased from the British Geological Survey (BGS). This comprised DiGMapGB-50 Bedrock Geology and Superficial for the entirety of Wiltshire and Swindon. Where available, data on Artificial Ground, Mass Movement and Linear Features was also provided. The digital data was viewed using GIS software (ArcMap 9.3.1).

### *Past, current and future extraction*

3.6 The location of all recorded aggregate minerals extraction planning permissions since 1947 was collated from information provided by the MPA, supplemented with BGS data. GIS layers provided by the MPA and used in this assessment are detailed in Table 3.1 below.

Table 3.1 GIS files provided by the MPA

| File Name | Data type | Description |
|---|---|---|
| Aggsites2009 | Point | Active, inactive and dormant aggregates sites in Wiltshire and Swindon. |
| WCC Quarries | Polygon | A dataset provided to the MPA by the BGS detailing the history of planning consents in Wilts and Swindon. |
| Minerals Preferred Areas | Polygon | Sites allocated in the old Minerals Local Plan. |
| Mineral Resource Zones | Polygon | The broad areas of search for sand and gravel extraction identified in the adopted Minerals Core Strategy which form the basis for sites that will eventually be included in the forthcoming site allocations DPD. |
| Other Agg Resources | Polygon | Areas of known aggregate bearing land that could potentially be the subject of small scale aggregates extraction in the longer term. |
| All Potential Agg Sites | Polygon | A working file detailing potential future sites (subject to change; data as 20/05/10 used for this assessment). |

3.7 In the Thames Valley, the GIS layer Aggsites2009 details status by quarry 'complex', giving a single point for each. The WCC Quarries GIS layer details quarry areas, which form part of the larger quarry complexes. These have been grouped together under the Aggsites2009 heading. The MPA advised on the status of quarry sites, i.e. if a site is active, dormant or ceased etc.

3.8 The data provided by the MPA was supplemented with information detailed in the BGS Commissioned Report *Mineral Resource Information in Support of National, Regional and Local Planning: Wiltshire (comprising Wiltshire and the Borough of Swindon)* (BGS 2004). This discusses and maps the minerals resource of the UAs and details areas of minerals planning permissions/workings. Quarries detailed on the minerals resource mapping but not in the Aggsites2009 data (or the WCC Quarries table) are considered to be 'not active'.

3.9 It was anticipated in the project design that information would also be obtained from the BGS Britpits Database. However, it was apparent that this information was duplicated in the data provided by the MPA and therefore it was not felt necessary to obtain this data.

### *Mapping the aggregates resource*

3.10 Following the identification of past, current and future aggregate extraction sites, these areas were cross referenced against the BGS 1:50,000 geological mapping to identify geological areas with potential for future extraction. These identified geologies were extracted from the BGS GIS data table to form the basis of the study area.

3.11 A number of areas of permissions/workings extended beyond the mapped extent of the target resource on the BGS 1:50,000 mapping. This was felt to be a result of three main factors: 1) the scale of mapping for the known quarry site, 2) the scale of

the BGS geological mapping which may have missed pockets of sand and gravel potentially masked by other deposits, and 3) that permission may be granted for quarrying before the presence of the resource is proven. Where mapped extents of quarries extended across geologies which are not target aggregate geologies, e.g. chalk, these non-aggregate geologies were not added to the study area. Such geologies are often extensive and do not typically mask aggregate deposits. To ensure that all sites potentially impacted by quarrying were addressed the extent of mapped quarries are added to the base study area. Alluvium is a common masking deposit, which may overly River Terrace deposits. Urban areas, as defined by the Office of National Statistics, were excluded from the study area. Environmental constraints, such as AONBs, ancient woodland and SSSIs were not excluded.

**Defining the Archaeological Resource – Objective 3**

3.12 The archaeological resource of the assessment area was defined using information derived from the Wiltshire and Swindon HER and a number of supplementary sources. Wiltshire and Swindon HER provided data in Excel format (see Appendix C for HER methodology) which was then converted into geo-referenced point data by Cotswold Archaeology using ArcView GIS. As it was felt that the use of point data could miss certain large sites, e.g. cropmark complexes where the central point of which might fall outside the study area, the HER also supplied AutoCAD tiles of the data. The tiles were opened in GIS and visual search undertaken to check for 'missed' sites. These missed sites were extracted from the HER excel data and saved into a new table (MissingDataFromCADtrawl.shp). This data was not incorporated into the calculation of monument densities (see below) but it was referenced when writing the period summaries. There is currently no Historic Landscape Characterisation data for most of Wiltshire, but a project is commencing in Autunm 2011 to rectify this. The Wiltshire and Swindon HER also provided grey literature development control sites reports.

3.13 Additional sources of information comprised:

*National Monuments Record*

- AMIE database of archaeological monuments and events.

*Portable Antiquities Scheme*

- Database of findspots.

*Previous published resource assessments*

- *The Archaeology of South West England: South West Archaeological Research Framework, Resource Assessment and Agenda* (Webster 2007); and
- *Thames Through Time* (Booth et al. 2007, and 2009).

*Other published archaeological sources*

- Including *Wessex to AD 1000* (Cunliffe 1993) and *Wessex from AD 1000* (Bettey 1986).
- A full list of published sources consulted is provided in Section 9: *References*

3.14 It had originally been anticipated in the Project Design that it would be possible to produce a list of all archaeological investigations (events) undertaken within the study area using HER data, and to cross reference this with the records for past and current extraction areas. The Wiltshire and Swindon HER is not currently able to

provide events data in a digital format and therefore it was necessary to adapt the methodology. The key aim was to compile a list of all archaeological investigations undertaken in response to aggregate extraction, or proposed aggregate extraction. The list was generated in the following way: first the AMIE event shape file was searched for sites intersecting with known aggregate quarries and the records were checked to see which were associated with aggregate extraction; then the AMIE events pdf document for the entire study area (which contains more data than the provided shape file) was searched for references to 'quarry', 'extraction', and 'gravel' to check for any additional sites; next the shape file generated from Excel data provided by the HER was searched for sites intersecting with known aggregate quarries and the comments and source data were checked for references to works associated with aggregate extraction; the County Archaeologist provided grey literature publications which had not yet been added to the HER; identified developer control reports, the BIAB and major publications (Lambrick and Robinson 2009; Booth *et al*, 2007) were checked for references to additional works; back-issues of the Wiltshire Archaeology and Natural History Magazine were searched for references to works associated with aggregate extraction (from 1945 to present); and finally the list of identified works was sent to Melanie Pomeroy-Kellinger, David Vaughan, and Clare King for the identification of any other known works.

3.15 The archaeological resource is discussed by period. The HER uses the periods Prehistoric, Palaeolithic, Mesolithic, Neolithic, Bronze Age, Iron Age, early medieval, medieval, post-medieval, 20th Century, 21st Century and Uncertain (see Appendix B). These periods have been used in this assessment with the exception of Prehistoric, 21st Century and Uncertain. Prehistoric has only five associated records, which have been incorporated into the Palaeolithic-Iron Age sections of this report. No 21st century sites are recorded on the WHER. Sites recorded as of uncertain date were incorporated into the Palaeolithic-20th century period discussions as appropriate.

*Comparative assessments of 'archaeological significance and probability of discovery'*

3.16 For the purposes of this report, at the end of each period description the archaeological resource is briefly assessed in terms of 'significance and probability of discovery'. This is provided as an overview guide to each period, to allow broad comparisons in the general likelihood of identifying currently unrecorded remains, and the potential importance of any such deposits. It should be noted that this is provided for use as a comparative tool to allow analysis of the resource between archaeological periods and to fulfil the objectives outlined in the project design. The term 'significance' is used in a very broad sense within the report, allowing a relative judgement of the value of the archaeological resource of respective periods to be made. Thus the overall general period assessment does not preclude the presence of individual sites of markedly different significance within the area of study.

**Monument Densities – Objective 3**

3.17 Monument density was calculated using HER data. Data for the study area was provided by the HER as an Excel data table with periods attributes attached. To calculate monument density the number of records per period were divided by the area in $km^2$. Checking the accuracy of the periods assigned to each record was beyond the scope of this study and no attempt was made to exclude records from the dataset for the purposes of calculating monument density where they were suspected of being assigned to the wrong period. Furthermore, no attempt was made to remove entries relating to stray finds from the dataset. Therefore the

densities produced as part of this report should be used with caution, and can only be seen as broadly indicative of the likely densities of archaeological remains for any particular period. The periods used in this study are detailed in Appendix B.

3.18 The calculated monument densities were compared to data presented in the *Monuments At Risk Survey* (Darvill and Fulton 1998) carried out by Bournemouth University to see how current levels of recorded monuments for each chronological period compare to figures that might be expected for such an area of the country.

**Research Agenda and Strategy – Objective 3**

3.19 During production of the Research Agenda reference was made to the Regional Research Framework, *The Archaeology of South West England: South West Archaeological Research Framework* (SWARF; Webster 2007), and local frameworks including *Thames Through Time* (Booth *et al*. 2007; Lambrick and Robinson 2009), both of which have been supported by English Heritage. It has also been informed by previous aggregate resource assessments, including those for Gloucestershire (GCC 2008), Warwickshire (Warwickshire CC 2007) and Worcestershire (Worcestershire CC and CA 2007), as well as a range of archaeological publications, referenced in the Resource Assessment.

3.20 Example strategies were produced for some of the research priorities identified, in order to provide further detail of how they might be achieved.

**Mitigation, Methodological and Strategy Review – Objective 4**

3.21 This information was used to assess the way in which the archaeological resource has been investigated and managed in the past, and the way in which it is currently managed. The effectiveness of the historic and current approaches were assessed with reference to two case studies. These were used to inform recommendations on how the archaeological resource, threatened by aggregate extraction, should be assessed and managed in future.

**Previous Aggregate Investigation – Objective 5**

3.22 The compiled list of archaeological investigations (see above) relating to aggregate extraction was used to identify investigations for which sufficient publication has not taken place. For each investigation a record was entered into a task-specific database.

3.23 The database was originally developed by ARCUS on behalf of English Heritage but stewardship was subsequently transferred to Wessex Archaeology. A project-specific version of the database was supplied by Wessex Archaeology and the database fields are detailed in Appendix A. The database auto-generates unique numbers for each record, allowing easy migration back into the main dataset. The criteria for assessing adequate dissemination was based upon guidance provided by Wessex Archaeology (see Appendix A).

**Outreach – Objective 7**

3.24 Following the review of this first draft, a seminar was held (22/06/2011) to disseminate the preliminary project results and encourage comment. A broad range of stakeholders were invited including local amateurs, local professional archaeologists and unit representatives, academics with specialist interest, English Heritage representatives including the regional science advisor, the Wiltshire

Council Archaeology Service, local councillors, minerals planners and industry representatives. Copies of the draft report will be issued to key stakeholders following the seminar.

3.25 The seminar comprised a short talk on the project methodology, followed by three talks based upon the results of the archaeological investigations at Down Ampney, Cotswold Community Centre, and Eysey Manor. These were followed by talks on the relationship between mineral extraction and archaeology, and Wiltshire Council Minerals Planning Policy. The seminar was concluded with an open discussion focused upon the outcomes of previous mitigation strategies and the future of archaeological mitigation strategies associated with aggregate extraction. Comments received will be integrated into the final report. Appendix E includes a seminar timetable and attendance list.

**Data Archiving**

3.26 All digital information generated by the project will be deposited with the Wiltshire and Swindon HER, and any unique data considered for migration into the HER (see below). Information in addition to a digital copy of the report will also be considered for deposition with the ADS, if appropriate. On completion of the project, the project specific database will be transferred to English Heritage (NHPC), and Wessex Archaeology, for migration into the main database.

**HER Data Enhancement**

3.27 Large scale enhancement of the HER records for the aggregate areas of Wiltshire does not form part of this project. Nevertheless the project is likely to result in the limited amendment/enhancement of HER records (i.e. identifying wrongly located records). The amended data will be passed to the Wiltshire and Swindon HER for incorporation within the record.

**The Mineral Development Framework - Objective 8**

3.28 It was originally anticipated that this Archaeological Resource Assessment would inform the preparation of the Mineral Development Framework. However, prior to the completion of this project relevant elements of the Mineral and Waste Development Framework were adopted, including the *Wiltshire and Swindon Minerals Core Strategy 2006-2026* (adopted June 2009) and the *Wiltshire and Swindon Minerals Development Control Policies Development Plan Document* (adopted September 2009). The Core Strategy recognises the quality of the historic environment in Wiltshire and Swindon along with the need to protect and enhance this asset (WC & SBC 2009, 23, 21) but does not include specific policies relating to the cultural heritage resource (ibid, 39). The Development Control Policies document details the required procedure for assessing the archaeological potential of a site, and includes policy MDC7, the Historic Environment, which aims to ensure an appropriate level of protection, enhancement, and/or preservation for the historic environment (WC 2009, 17). Responses to the *Initial Site Options Report for the Wiltshire and Swindon Aggregate Minerals Site Allocations DPD* (WC & SBC 2010), issued August 2010, were required by 30th September 2010. These areas were searched for associated designated sites and additional information was forwarded to the MPA on 23 August 2010 (see Appendix D).

3.29 The small area of south-east Wiltshire which falls within the New Forest National Park is covered by the Hampshire Minerals and Waste Strategy (adopted July 2007).

# 4. DESCRIPTION OF AGGREGATES RESOURCE

## Introduction

4.1 This section describes pervious works on geologies prior to identifying geologies with potential for future extraction. The identified geologies are then divided into Aggregate Character Areas and Aggregate Sub Areas for the discussion of the archaeological resource.

4.2 Aggregate deposits exploited in Wiltshire fall into three categories: superficial sand and gravel deposits (sharp sand and gravel), bedrock sand deposits (soft sand), and crushed rock aggregates. No current or past extraction of aggregates is recorded in Swindon. It is expected that Wiltshire will need to produce 1.85 million tonnes of aggregate per annum up to 2016 (WC & SBC 2009, 23). Post 2016 figures are not fixed, but 1.85 million tonnes per annum is currently being used as a guide. Past supply has been split approximately ¾ to ¼ between the sharp sand and gravel deposits of the Thames Valley and soft sand deposits in the vicinity of Calne respectively (ibid, 14).

## Past and present extraction

### *Sharp Sand and Gravel*

4.3 Exploited deposits of sharp sand and gravel in Wiltshire comprise River Terraces. The term *sharp* in this context refers to the shape of the grain. These superficial deposits date from the Late Anglian to Devensian stages of the Pleistocene Epoch and occur as raised terrace sequences, or flood plain terraces associated with and underlying deposits of alluvium (BGS 2004, 2-3). The river terrace deposits are illustrated on Fig. 5, and are associated with the river systems of the Upper Thames Valley, the Bristol Avon, the Kennet, the Salisbury Avon (and its tributaries), and tributaries of the Stour and the Test. Areas of alluvium overlying the terrace sharp sand and gravel deposits are also illustrated on Fig. 5 within the same areas. The alluvium deposits are a result of ongoing depositional processes, and may date from the later Devensian Stage of the Pleistocene and the Flandrain Stage of the Holocene. Sharp sand and gravel is mainly used in the production of concrete while low quality material is used as fill in construction and for road base construction (WCC 2001, 10).

*Thames*

4.4 The Thames Valley extends into the northern area of Wiltshire. Here river terrace deposits are at their most extensive and thickest in Wiltshire and have been intensively worked. Thames Valley deposits are considered to the best river terrace deposits in terms of quality and quantity in the South West region (WC & SBC 2009, 11).

4.5 Recorded quarry sites exploiting the resource of the Thames Valley are detailed alphabetically in Table 4.1 below and illustrated on Figs. 3 and 4. These include active quarries and quarry complexes and two dormant quarries. Seven quarries have ceased works (planning permission expired), one has been refused, one withdrawn and the planning status of one is unknown (not active).

4.6 Recorded quarry sites are focused on the Thames Valley Formation, predominantly Northmoore Sand and Gravel Member (including the Lower and Upper Facet) as well as the Summertown-Radley Sand and Gravel Member. Thames Valley Formation deposits comprising the Hanborough Gravel Member and the Wolvercote

Sand and Gravel Member are also mapped in the area. Alluvium may mask sharp sand and gravel deposits.

Table 4.1 Quarries exploiting Thames Valley deposits

| Quarry | Status | Source | BGS Resource | LEX_RCS* |
|---|---|---|---|---|
| Barnground | Ceased | Senior Planner, Minerals and Waste | Thames Valley Formation (Northmoore Sand and Gravel Member) | NO-XSV |
| Cleveland Farm Complex (Including Rixon Gate, Rixon Farm, Manor Farm Leigh, Wheatley Barn Farm and Fridays Ham Lane) | Active | Aggsites2009/WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Cotswold Community | Active | Aggsites2009/WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member) | NO-XSV |
| Cottage Lake | Ceased | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Eysey Manor Farm (Preferred Area 2) | Active | Aggsites2009/WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Northmoore Sand and Gravel Member Lower Facet/Alluvium | NO-XSV NO1A-XSV ALV-XCZSV |
| Kent End Complex | Active | Aggsites2009/WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Latton Lands | Ceased | Senior Planner, Minerals and Waste | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Mallard Lake | Ceased | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |

* LEX_RCS is a two-part code used to label BGS polygons within the DiGMapGB-50 GIS layers. The LEX (Lexicon) part is an abbreviation of the rock unit or deposit. The second part, RCS (Rock Classification Scheme), is a code for the type of rock or lithology. These codes were used within the SQL queries which extracted the identified aggregate geologies from the main BGS dataset (see *Aggregate Character Areas* below).

| Quarry | Status | Source | BGS Resource | LEX_RCS* |
|---|---|---|---|---|
| Manor Farm Complex (Including Dairy Farm/Manor Farm South, Manor Farm North, Lake 35, Lake 37, Freeths Wood, North End West and Three Bridges) | Active | Aggsites2009/WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| North End Works/North End Farm | Dormant | Aggsites2009/WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member) | NO-XSV |
| Roundhouse Farm (Preferred Area 5) | Active | Aggsites2009 WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member, Lower Facet)/Alluvium | NO1A-XSV ALV-XCZSV |
| Sandpool Farm | Unknown (not active) | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Shades Farm | Withdrawn | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member) | NO-XSV |
| Spratsgate Lane, Somerfield Keynes | Ceased | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member) | NO-XSV |
| Swans Lane Bridge | Ceased | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member) | NO-XSV |
| Swillbrook Bridge | Refused | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Upper Waterhay | Ceased | WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |
| Wickwater Farm | Dormant | Aggsites2009 WCC Quarries | Thames Valley Formation (Northmoore Sand and Gravel Member)/Alluvium | NO-XSV ALV-XCZSV |

*Bristol Avon*

4.7 The Bristol Avon crosses the north-western area of Wiltshire. No active aggregate quarries are recorded for associated deposits. Two quarry sites, Lacock and Seagry, are recorded for this area (Table 4.2, Fig. 3). Both recorded quarry sites are focused

on First River Terrace Deposits. Second River Terrace Deposits mapped in this area are also a potential aggregate resource (BGS 2004).

Table 4.2 Quarries exploiting deposits associated with the Bristol Avon

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Lacock | Ceased | WCC Quarries | River Terrace Deposits, 1 | RTD1-XSV |
| Seagry/Great Somerford | Unknown (not active) | BGS 2004 | River Terrace Deposits 1 | RTD1-XSV |

*Kennet*

4.8 The River Kennet crosses west/east through the eastern area of Wiltshire. It is a major tributary of the Thames (see above), although is considered here as a separate area in its own right. No active aggregate quarries are recorded on associated deposits. One previous extraction site, Piggledean, has been identified (Table 4.3, Fig. 3). The recorded quarry site is focused on undifferentiated River Terrace Deposits. Beenham Grange Gravel Member mapped in this area is also a potential aggregate resource (BGS 2004).

Table 4.3 Quarries exploiting deposits associated with the River Kennet

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Piggledean | Ceased | WCC Quarries | River Terrace Deposits (Undifferentiated) | RTDU-XSV |

*Salisbury Avon*

4.9 The Salisbury Avon runs north-south through the southern area of Wiltshire. Major tributaries of the Salisbury Avon in Wiltshire comprise the Ebble, Nadder, Wylye and Bourne. No active aggregate quarries are associated with the Salisbury Avon. Four quarries focused on associated deposits are recorded (Table 4.4, Fig. 3).

4.10 The recorded quarry sites focus on Ninth River Terrace Deposits and Alluvium overlying Fourth River Terrace Deposits. One sand quarry, Alderby Sand Quarry, is recorded across an area of Culver Chalk Formation. It is 180m west of Fourth River Terrace Deposits associated with the Salisbury Avon. Undifferentiated, Third, Seventh, Eighth, and Tenth River Terrace Deposits are also mapped in the area and may be a potential source of aggregate (BGS 2004).

Table 4.4 Quarries exploiting deposits associated with the Salisbury Avon

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Alderbury Borrow Pit | Unknown | BGS 2004 | River Terrace Deposit 9 | RTD9 |
| Alderbury Sand | Ceased | WCC Quarries | - | - |
| Peters Finger, Salisbury | Ceased | WCC Quarries | Alluvium (Overlying River Terrace 4) | ALV-XCSV (RTD4-XSV) |
| Steeple Langford | Ceased | WCC Quarries | Alluvium (overlying River Terrace Deposits 4) | ALV-XCSV (RTD4-XSV) |

*Tributaries of the Stour*

4.11 Tributaries of the River Stour, including the northern extent of the Shreen Water extend into the south-western area of Wiltshire. No associated quarry sites are recorded within Wiltshire. However, River Terrace deposits (First, Second and Undifferentiated) are recorded in this are and may be a potential source of aggregate (BGS 2004).

*Tributaries of the Test*

4.12 Tributaries of the River Test, including the western extent of the River Blackwater, extend into the south-eastern area of Wiltshire. One dormant quarry, Giles Lane, is recorded in this area (Table 4.5, Fig. 3).

4.13 The mapped quarry, recorded as exploiting sharp sand and gravel, extends across Undifferentiated River Terrace Deposits (a sharp sand and gravel resource) and masking Alluvium, as well as Whitecliff Sand Member (a soft sand resource). An adjacent area of quarry of the same name, mapped across Whitecliff Sand Member, is recorded as exploiting soft sand deposits (see *Soft Sand* below).

Table 4.5 Quarries exploiting deposits associated with the River Test

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Giles Lane, Plaitford | Dormant | WCC Quarries | Undifferentiated River Terrace Deposits/Alluvium | RTDU-XSV ALV-XCZSV |

***Soft Sand***

4.14 Exploited deposits of soft sand in Wiltshire comprise solid geology. Exploited deposits include Lower Greensand, Upper Greensand, Reading Beds, Bagshot Beds, Bracklesham Group and Hazelbury Bryan Formation (Fig. 6). Soft sand is used as a construction aggregate in the production of mortars, plasters, asphalt and macadam (WCC 2001, 10).

*Lower Greensand*

4.15 Lower Greensand deposits occur in a narrow belt running south-west/north-east across the northern area of the county, between the Bristol Avon and the River Kennet. These deposits comprise marine sands and sandstones with some mudstone beds (BGS 2004, 4).

4.16 Two active quarries exploiting this resource are recorded in the vicinity of Calne, Sands Farm Quarry and Compton Bassett Quarry (WC & SBC 2009). Two dormant quarries, Freeth Farm and High Penn Farm, are also recorded in the vicinity of the active site. Two other quarry sites, Kilima Farm and Nethermore Sand Pit, are recorded to the south-west of Calne (Table 4.6, Fig. 3).

Table 4.6 Quarries exploiting Lower Greensand deposits

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Compton Bassett | Active | Aggsites2009/WCC Quarries | Lower Greensand Group Sandstone | LGS-SDST |
| Freeth Farm | Dormant | Aggsites2009/Wcc Quaries | Lower Greensand Group Sandstone | LGS-SDST |

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| High Penn Farm | Dormant | Aggsites2009/WCC Quarries | Lower Greensand Group Sandstone | LGS-SDST |
| Kilima Farm | Unknown | BGS 2004 | Lower Greensand Group Sandstone | LGS-SDST |
| Nethermore Sand Pit | Unknown | BGS 2004 | Lower Greensand Group Sandstone | LGS-SDST |
| Sands Farm Complex | Active | Aggsites2009 WCC Quarries | Lower Greensand Group Sandstone | LGS-SDST |

*Upper Greensand*

4.17 Upper Greensand deposits identified as an aggregates resource occur in the south-western area of Wiltshire. These deposits have been worked for aggregate at Old Hurdcotte Quarry and Bedwell Park (Table 4.7, Fig. 3). Upper Greensand Formation Calcareous Sandstone and Siltstone has previously been worked for Moulding Sand at Devizes Sand Pit. However, no aggregate quarries were recorded on this resource and it has not been included in the study area.

Table 4.7 Quarries exploiting Upper Greensand deposits

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Bedwell Park | Ceased | WCC Quarries | Upper Greensand Formation (Shaftsbury Sandstone Member, Can Sand Member, Boyne Hollow Chert Member) | SHYS-SDST<br>CANS-SDST<br>BHC-SDST |
| Old Hurdcott Quarry | Uncertain | WCC Quarries | Boyne Hollow Chert Member Siltstone and Limestone<br>Melbury Sandstone Member limestone and siltstone | BHC-SLLM<br>MYS-SLLM |

*Reading Beds, Lambeth Group*

4.18 Reading Beds of the Lambeth Group occur in the south-eastern area of Wiltshire. The resource is predominantly clay, but local occurrences of sand and pebble beds occur (BGS 2004, 4). Two active quarries exploiting the Reading Beds are recorded, Brickworth Quarry and Lower Pensworth Quarry (WC & SBC 2009). Six former quarry sites are also recorded (Table 4.8, Fig. 3).

Table 4.8 Quarries exploiting Reading Beds/Lambeth Group Deposits

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Blaxwell Farm | Ceased | WCC Quarries | Reading Formation, Sand | RB-SANDU |
| Brickworth Quarry | Active | Aggsites2009 WCC Quarries | Reading Formation Sand<br>Reading Formation Sand, Silt and Clay | RB-SANDU<br>RB-SSCL |
| Broxmore Park | Unknown | BGS 2004 | Lambeth Group Gravelly Sand/Lambeth Group Sand | LMBE-SV<br>LMBE-SANDU |
| Bushey Copse, Whiteparish | Ceased | WCC Quarries | Lambeth Group Gravelly Sand<br>Reading Formation Sand | LMBE-SV<br>RB-SANDU |

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Hardings Sand Pits | Ceased | WCC Quarries | Lambeth Group Clay Silt Sand | LMBE-CLSISA |
| Lower Pensworth | Active | WCC Quarries | Reading Formation Sand | RB-SANDU |
| Rye Hill Copse | Unknown | BGS 2004 | Reading Formation Sand | RB-SANDU |
| White Farm/Whites Farm, Whiteparish | Ceased | WCC Quarries | Reading Formation Sand | RB-SANDU |

*Bagshot Beds/Bracklesham Group*

4.19 The Bagshot Beds (Whitecliffe Sand Member) and the Bracklesham Group (Wittering, Earnley and Selsey Formations; BGS 1982, 100) occur in the south-eastern area of Wiltshire (BGS 2004, 3-4). These deposits are actively worked at Pound Bottom and a dormant quarry is recorded at Giles Lane. Two ceased quarries, Broomhill and Whaddon are also recorded (Table 4.9, Fig. 3).

Table 4.9 Quarries exploiting Bagshot Beds/Bracklesham Group Deposits

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Broomhill | Ceased | WCC Quarries | Earnley Sand Formation/Marsh Farm Formation Wittering Formaition Sand, Silt and Clay | EA-SSCL MARF-CLSISA WTT-SSCL |
| Giles Lane, Plaitford | Dormant | Aggsites2009 WCC Quarries | Alluvium overlying Whitecliff Sand Member Sand/Wittering Formation Sand Silt Clay | WHI-SANDU WTT-SSCL |
| Pound Bottom, Red Lynch | Active | WCC Quarries | Selsey Sand Formation Marsh Farm Formation Clay Silt and Sand | SLSY-SSCL MARF-CLSISA |
| Whaddon | Ceased | WCC Quarries | Wittering formation sand, silt and clay | WTT-SSCL |

*Hazelbury Bryan Formation*

4.20 Lower Calcareous Grit Formation of the Corallian Group, also known as the Kingstone Formation or the Hazelbury Bryan Formation have previously been worked for soft sand near Melksham (BGS 2004, 4; Table 4.10, Fig. 3). These deposits are mainly fine-grained sands, with occasional layers of calcareous sandstone (ibid).

Table 4.10 Quarries exploiting the Hazelbury Bryan Formation

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Sahara Sand Pit | Ceased | WCC Quarries | Hazelbury Bryan Formation Sandstone | HYB-SDST |

### *Crushed Rock*

4.21 Limestone deposits in the north-western area of Wiltshire have been used to produce crushed rock aggregate. Crushed rock aggregate has been produced at Knockdown Quarry (permission now lapsed) and Widleys Gorse (dormant) (Table 4.11, Fig. 3). Recorded quarries are located on Chalfield Oolite Formation Ooidal Limestone and Forest Marble Formation Limestone. A small area of adjacent Forest Marble Formation Ooidal Limestone (FMB-LMOOL), may be a comparable resource.

Table 4.11 Quarries producing crushed rock aggregate (Limestone)

| **Quarry** | **Status** | **Source** | **BGS Resource** | **LEC_RCS (see table 4.1)** |
|---|---|---|---|---|
| Knockdown Quarry | Active/temporarily inactive | Aggsites2009 /WCC Quarries | Forest Marble Formation Limestone Chalfield Oolite Formation Ooidal Limestone | FMB-LMST CFDO-LMOOL |
| Widleys Gorse | Dormant | Aggsites2009 | Forest Marble Formation | FMB-LMST |

### Future Extraction

4.22 In order to meet production requirements for sand and gravel aggregates it is anticipated that it will be necessary to expand to sites currently without planning permission in the Upper Thames Valley prior to 2016, and also to explore alternative production areas for sharp sand and gravel and soft sand prior to 2026 (WC & SBC 2009, 23, 15, 24, 51).

4.23 The Local Authority is not looking to allocate any additional crushed rock aggregate sites before 2026. This is due to the poor quality of this resource within Wiltshire, better resources can be found in adjacent Somerset (Mark Henderson, pers. comm. 23/04/10). The current land bank of crushed rock aggregate (limestone) is considered to be in excess of the quantity required up to 2026 (WC & SBC 2009, 15).

*Preferred Areas*

4.24 In the short term, future extraction of sand and gravel is likely to focus on preferred areas in the Thames Valley identified in the Minerals Local Plan (WCC 2001). Permission has been granted for four of these preferred areas (two of which are active) and permission is currently being sought for the remaining areas (Mark Henderson, pers. comm.). Preferred areas are detailed in Table 4.12 and illustrated on Fig. 3. The undeveloped Preferred Areas 1, 3 and 4 are currently the subject of a planning application for sand and gravel extraction (as at March 2011).

Table 4.12 Preferred Areas

| **Quarry** | **Status** | **Source** | **BGS Resource** | **LEC_RCS (see table 4.1)** |
|---|---|---|---|---|

| Quarry | Status | Source | BGS Resource | LEC_RCS (see table 4.1) |
|---|---|---|---|---|
| Preferred Area 1 (Latton Preferred Area) | Permitted | Aggsites2009 Minerals Preferred Areas | Thames Valley Formation (Northmoore Sand and Gravel Member Upper Facet/Northmoore Sand and Gravel Member/Alluvium) | NO-XSV NO1B-XSV ALV-XCZSV |
| Preferred Area 1 | Undeveloped | Minerals Preferred Areas | Thames Valley Formation (Northmoore Sand and Gravel Member/Northmoore Sand and Gravel Member Upper Facet)/Alluvium | NO-XSV NO1A-XSV ALV-XCZSV |
| Preferred Area 2 | See Eysey Manor Farm Table 4.1 above | See Eysey Manor Farm Table 4.1 above | See Eysey Manor Farm Table 4.1 above | See Eysey Manor Farm Table 4.1 above |
| Preferred Area 3 | Undeveloped | Minerals Preferred Areas | Thames Valley Formation (Northmoore Sand and Gravel Member, Lower Facet) | NO1A-XSV |
| Preferred Area 4 | Undeveloped | Minerals Preferred Areas | Thames Valley Formation (Northmoore Sand and Gravel Member Lower Facet/Summertown-Radley Sand and Gravel Member) | NO1A-XSV SURA-XSV ALV-XCZSV |
| Preferred Area 5 | See Roundhouse Farm Table 4.1 above | See Roundhouse Farm Table 4.1 above | See Roundhouse Farm Table 4.1 above | See Roundhouse Farm Table 4.1 above |
| Preferred Area 6 (Latton Preferred Area) | Permitted | Aggsites2009 Minerals Preferred Areas | Thames Valley Formation (Northmoore Sand and Gravel Member/Summertown-Radley Sand and Gravel Member) | NO-XSV SURA-XSV |

*Potential Aggregate Sites*

4.25 The MPA provided a GIS layer detailing potential future aggregate sites (Figs. 3 and 4). Although this is subject to change the data as fixed at 20/05/10 was incorporated into the dataset. Potential aggregate sites have been identified for sharp sand and gravel deposits associated with the Thames Valley, the Bristol Avon and the Salisbury Avon. Potential sites focusing on the soft sand resource have been identified in the vicinity of Calne and in the south-eastern part of the study area.

*Wiltshire and Swindon Minerals Core Strategy*

4.26 The Wiltshire and Swindon Minerals Core Strategy has identified Mineral Resource Zones associated with potential sand and gravel extraction, which will be used in the allocation of sites for the Development Plan Document (WC & SBC 2009; Fig. 3). Areas of other aggregate resources have also been identified, which may be the subject of small scale aggregate extraction (Mark Henderson, pers. comm.).

4.27 Mineral Resource Zones for sharp sand and gravel are associated with the Thames Valley, the Bristol Avon and the Salisbury Avon. Mineral Resource Zones for soft sands have been identified in the vicinity of Calne and in the south-eastern area of Wiltshire. Other sharp sand and gravel aggregate resources have been identified

associated with the tributaries of the Salisbury Avon and with the River Kennet. Soft sand resources may also be identified with deposits in the eastern area of Wiltshire. Parts of the Mineral Resource Zones extend beyond the resource identified on the BGS mapping. These areas have been added to the dataset.

*Hampshire Minerals and Waste Development Framework*

4.28 The Hampshire Minerals and Waste Development Framework included the south-eastern area of Wiltshire which falls within the New Forrest National Park. The Key Diagram within this Development Framework maps Safeguarded Sand and Gravel Deposits. In addition to the resources identified above these include Nursling Sand Member (NU-CLSISA). It also includes a small area of Head (HCC *et al*, 2008, Key Diagram). Inclusion on this diagram does not necessarily indicate a commercially viable resource (HCC *et al*, 2008, 45).

**Aggregate Character Areas**

4.29 Following identification of geologies with potential for future extraction above, the aggregates resource of Wiltshire has been divided into three Aggregate Character Areas (ACAs): Sharp Sand and Gravel, Soft Sand and Crushed Rock (Fig. 7). Sharp Sand and Gravel is divided into Aggregate Sub-Areas (AS-A) based on river valleys and Soft Sand on the basis of geographical area (Fig. 8).

**Sharp Sand and Gravel ACA**

4.30 The sharp sand and gravel resource comprises River Terrace Deposits, including the Thames Valley Formation and the Beenham Grange Gravel Member of the Thames and Kennet respectively, as well as overlying alluvium as mapped by the BGS 1:50,000 digital mapping. These river valley systems were, and are, dynamic depositional and erosional systems and deposits of alluvium continue to be laid down. Thus evidence for human occupation is inevitably intertwined with such geomorphological processes, and archaeological remains can be interleaved within naturally deposited alluvial material. Although four quarries are mapped across areas of Head, these deposits are not the target resource. Head deposits are relatively extensive in Wiltshire, dendritic in form, and often narrow. Inclusion of Head deposits in the dataset would result in a large expansion of the study area, not felt to be useful and they have therefore been excluded where they are beyond the limits of quarries.

4.31 River Terrace Deposits and Alluvial deposits were extracted from the BGS digital data (SQL Query: “LEX_D” Like ‘%RIVER TERRACE%’ OR “FM_EQ_D” = ‘THAMES VALLEY FORMATION’ OR “LEX_RCS” = ‘BGGR-XSV’ OR “LEX” = ‘ALV’ OR “LEX” LIKE ‘NO%’). Potential resources underlying narrow deposits of alluvium, considered to be obviously financially unviable, were removed from the dataset, guided by the BGS minerals resource information (BGS 2004). The recorded extent of two sharp sand and gravel quarries, Alderbury Borrow Pit and Great Somerford, extended beyond the BGS mapped resource. These areas were added to the dataset. Potential aggregate sites, Mineral Resource Zones, and other areas of aggregate resource which extended beyond the mapped extent of the BGS resource were also added. A 100m buffer was added to the combined identified resource and urban areas were then excluded.

4.32 The resulting Sharp Sand and Gravel ACA (Fig. 7) was then divided into six Aggregate Sub-Areas on the basis of river valleys (Fig. 8): the Thames Valley AS-A, the Bristol Avon AS-A, the Kennet AS-A, the Salisbury Avon AS-A, the Stour Tributaries AS-A and the Test Tributaries AS-A.

### Soft Sand ACA

4.33 The soft sand resource comprises Lower Greensand, Upper Greensand (excluding Calcareous Sandstone and Siltstone, see above), Reading Beds/Lambeth Group, Bagshot Beds/Bracklesham Group, Hazelbury Bryan Formation, and Nursling Sand Member deposits. These deposits were extracted from the BGS digital data (SQL Query: "LEX_RCS" = 'LGS-SDST' OR "LEX_RCS" = 'SHYS-SDST' OR "LEX_RCS" = 'CANS-SDST' OR "LEX_RCS" = 'BHC-SDST' OR "LEX_RCS" = 'BHC-SSLM' OR "LEX_RCS" = 'MYS-SLLM' OR "LEX_RCS" = 'RB-SANDU' OR "LEX_RCS" = 'RB-SSCL' OR "LEX_RCS" = 'EA-SSCL' OR "LEX_RCS" = 'WTT-SSCL' OR "LEX_RCS" = 'LMBE-SV' OR "LEX_RCS" = 'LMBE-SANDU' OR "LEX_RCS" = 'LMBE-CLSISA' OR "LEX_RCS" = 'WHI-SANDU' OR "LEX_RCS" = 'SLSY-SSCL' OR "LEX_RCS" = 'MARF-CLSISA' OR "LEX_RCS" = 'HYB-SDST' OR "LEX_RCS" = 'NU-CLSICA'). The recorded extents of soft sand quarries, potential aggregate sites, relevant Mineral Resource Zones and other areas of aggregate resource which extended beyond the BGS mapped resource were also added to the dataset. A 100m buffer was added to the combined identified resource and urban areas were then excluded.

4.34 The resulting Soft Sand ACA (Fig. 7) was then divided into four Aggregate Sub-Areas (Fig. 8) on the basis of geology and geographical area: the North-West AS-A (focused on Lower Greensand and Hazelbury Bryan Formation), the South-West AS-A (focused on Upper Greensand), the South-East AS-A (focused on Reading Beds/Lambeth Group and Bagshot Beds/Bracklesham Group in the south-eastern area of Wiltshire), and the Central-East AS-A (focused on Lambeth Group deposits in the central-eastern area of Wiltshire).

### Crushed Rock ACA

4.35 The Crushed Rock Aggregate ACA comprises Chalfield Oolite Formation Ooidal Limestone and Forest Marble Formation Limestone and Forest Marble Formation Ooidal Limestone (SQL Query: "LEX_RCS" = 'CFDO-LMOOL' OR "LEX_RCS" = 'FMB-LMST" OR "LEX_RCS" = 'FMB-LMOOL'). A 100m buffer around this resource was included. Urban areas were then excluded.

4.36 The resulting Crushed Rock ACA (Fig. 7) was not sub-divided into Aggregate Sub-Areas.

## 5. DESCRIPTION OF THE ARCHAEOLOGICAL RESOURCE

### Summary of previous archaeological works

5.1 The vast majority of previous archaeological works within the study area have been conducted in relation to the extraction of gravels within the Thames Valley AS-A. Due to the large-scale nature of gravel extraction, mitigation measures associated with such works offer a uinique opportunity to study the archaeological resource from a landscape perspective. Mitigation works associated with sites such as Down Ampney, Cotswold Community, and Eysey Manor Farm have contributed massively to our understanding of later prehistoric landscapes in the Upper Thames Valley. However, such archaeological works also have the potential to contribute to the study of earlier and later archaeological periods. The following chapter of the report describes the known archaeological resource of the aggregate producing areas of Wiltshire, and in doing so highlights the potential contribution mitigation strategies can make.

## Introduction

5.2 The following section comprises a description of the archaeological resource of the Aggregate Character Areas, divided into three main sections: an overview of previous archaeological work; analysis of monument densities; and a discussion of archaeological resource by period. Information is based upon the WHER data, supplemented using the sources detailed in *Methodology* above. This assessment is not intended to be a review of the county as a whole, although the resource outside the Aggregate Character Areas is referenced where appropriate.

## Monument Density

### *Calculating Monument Density*

5.3 Data was provided by the HER as an Excel data table with period attributes attached. This data was transferred to GIS (ArcView) using provided x and y co-ordinates. The WHER uses thirteen period categories: Prehistoric, Palaeolithic, Mesolithic, Neolithic, Bronze Age, Iron Age, Roman, early medieval, medieval, post-medieval, 20th Century, 21st Century, and Uncertain. To calculate monument density the number of records per period were divided by the area of the county and ACAs in $km^2$. The results are detailed in Table 5.1 below, expressed to two decimal places, and illustrated in Graph 5.1.

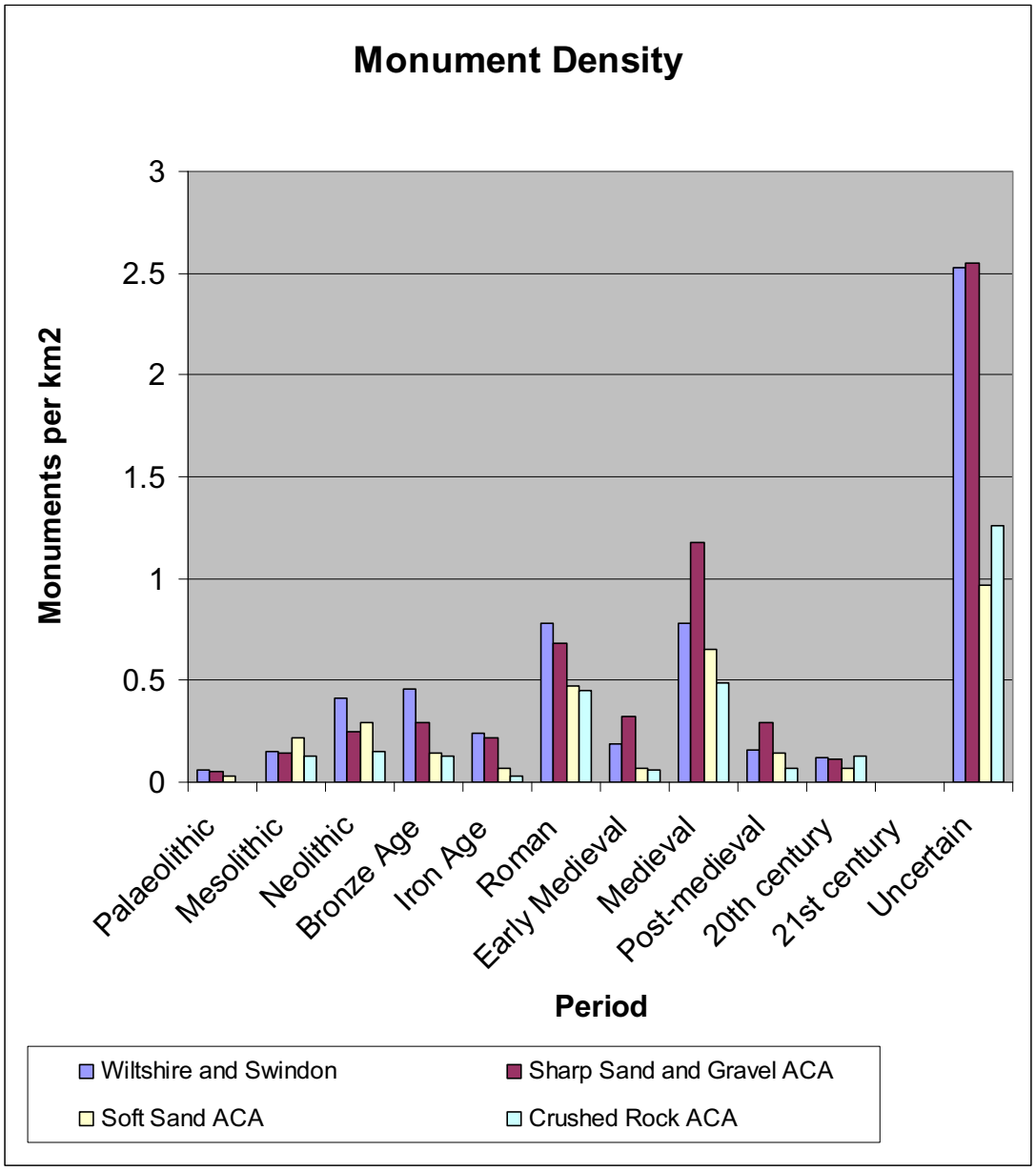
Table 5.1 Monument Density for HER sites in Wiltshire and the Aggregate Character Areas

| **Period** | **Wiltshire (3485 $km^2$)** | | **Sharp Sand and Gravel (398 $km^2$)** | | **Soft Sand (342 $km^2$)** | | **Crushed Rock (88 $km^2$)** | |
|---|---|---|---|---|---|---|---|---|
| | **Number of Records** | **Density ($km^2$)** | **Number of Records** | **Density ($km^2$)** | **Number of Records** | **Density ($km^2$)** | **Number of Records** | **Density ($km^2$)** |
| Prehistoric | 5 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Palaeolithic | 209 | 0.06 | 20 | 0.05 | 11 | 0.03 | 0 | 0 |
| Mesolithic | 532 | 0.15 | 54 | 0.14 | 74 | 0.22 | 11 | 0.13 |
| Neolithic | 1428 | 0.41 | 98 | 0.25 | 99 | 0.29 | 13 | 0.15 |
| Bronze Age | 1619 | 0.46 | 115 | 0.29 | 47 | 0.14 | 11 | 0.13 |
| Iron Age | 849 | 0.24 | 86 | 0.22 | 25 | 0.07 | 3 | 0.03 |
| Roman | 2702 | 0.78 | 270 | 0.68 | 162 | 0.47 | 40 | 0.45 |
| Early medieval | 647 | 0.19 | 127 | 0.32 | 25 | 0.07 | 5 | 0.06 |
| Medieval | 2734 | 0.78 | 471 | 1.18 | 224 | 0.65 | 43 | 0.49 |
| Post-medieval | 559 | 0.17 | 114 | 0.29 | 49 | 0.14 | 6 | 0.07 |
| 20th century (Recent) | 414 | 0.12 | 42 | 0.11 | 25 | 0.07 | 11 | 0.13 |
| 21st century | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Uncertain | 8830 | 2.53 | 1013 | 2.55 | 332 | 0.97 | 111 | 1.26 |
| Total | 20528 | 5.89 | 2410 | 6.06 | 1073 | 3.14 | 254 | 2.89 |

5.4 The monument density figures detailed in Table 5.1 show that overall there is a higher level of total recorded sites within the Sharp Sand and Gravel ACA (6.06 per $km^2$), compared to Wiltshire as a whole (5.89 per $km^2$). The number of recorded sites within the Soft Sand ACA (0.97 per $km^2$) and the Crushed Rock ACA (2.89 per $km^2$) is approximately half of that recorded for Wiltshire (5.89 per $km^2$). It should be bourne in mind that these density figures are based upon known, recorded sites

within the Wiltshire HER, and are thus govererned by factors such as the visibility of archaeology, foci of previous archaeological research and documentation of archaeological investigations. Monument density by period is illustrated in Graph 5.1 and discussed below.

Graph 5.1 Monument Densities for Wiltshire and Swindon and the Aggregate Character Areas




5.5 The monument density figures detailed in Table 5.1 and illustrated in graph 5.1, show a rise in the density of recorded sites from the Palaeolithic to the Bronze Age, before a drop in the Iron Age. This relatively low level of Iron Age sites may simply reflect the high level of Neolithic and Bronze Age sites in the county. The density of sites then rises for the Roman period before a second, expected, drop for the early medieval period, a period which is typically poorly recognised/represented in the archaeological resource. This is followed by a rise for the medieval period, due to the higher rate of survival of this resource, as well as its greater visibility. The number of post-medieval records is notably low, a reflection of the fact that sites of this date have typically not been added to the WHER. The low-level of 20th-century sites is more expected, reflecting the number of modern sites likely to be considered as of cultural heritage interest. Unsurprisingly, no sites are yet recorded for the 21st century. Most notable is the dominance of sites of uncertain date. This includes the large number of cropmarks and earthworks, identified on aerial photographs recorded within the county. Many of these are likely to be of prehistoric or Roman

date, including probable round barrows most likely of Bronze Age date. The higher density recorded for the Sharp Sand and Gravel ACA, compared to the other ACAs (2.55 per km$^2$ compared to 0.97/1.26 per km$^2$), reflects the suitability of the geology for the formation of cropmarks.

5.6 While the total monument density for the Sharp Sand and Gravel ACA is higher than for Wiltshire as a whole (6.06 per km$^2$ compared to 5.89 per km$^2$), when considered by period the ACAs generally have a lower density of sites. The exception being the Soft Sand ACA for the Mesolithic period, the Sharp Sand and Gravel ACA for the early medieval period, medieval and post-medieval periods, and the Crushed Rock ACA for the 20th century. The lower level of prehistoric sites generally recorded within the ACAs, compared to Wiltshire as a whole, may be related to the high number of well-documented sites associated with the monumental landscapes of the chalk downlands. The high level of early medieval to post-medieval sites recorded for the Sharp Sand and Gravel ACAs is likely to reflect a focus of activity on the river valleys. Detailed discussion of monument density by period and ACA is included in the period summaries below. Discussion of monument density by AS-A is also included in the period summaries, where relevant.

### *Comparison of Monument Densties: MARS*

5.7 MARS (Monuments at Risk Survey) provides data on the density of archaeological records and the density of archaeological monuments across England in 1995 (Darvill and Fulton 1998). The archaeological records data assessed by MARS was calculated from all recorded sites while for archaeological monuments 'unsuitable' records, such as monuments with an unknown location, stray finds, single burials, place-name/historic source evidence, post-1700 buildings in domestic use and post-1900 buildings were filtered out. Filtering the dataset for the entirety of Wiltshire was beyond the scope of this project (see above). Therefore it is more relevant to compare the monument density results for this project with the record density produced by MARS.

5.8 In 1995, the mean density of archaeological records for England was calculated by MARS as 5.04 records per km$^2$ (Darvill and Fulton 1998, 67, 88) (Table 5.2). At this time Wiltshire and Swindon had a total of 15773 retrievable records, resulting in a record density of 4.52 per km$^2$ (Darvill and Fulton 1998, Table 4.2), slightly lower than the 5.04 calculated for the country as a whole (Table 5.2). Currently the Wiltshire and Swindon HER holds 20528 records (calculated November 2009), with a record density of 5.89 per km$^2$. This higher figure reflects the addition of new records between 1995 and 2010.

Table 5.2 Comparison of MARS/WHER record density

| **Area** | **Records per km$^2$** |
|---|---|
| MARS England (1995) | 5.04 (records) |
| MARS Wiltshire (1995) | 4.52 (records) |
| WHER (2010) | 5.89 |

### Designated Sites

5.9 The ACAs make up 24% of the total area of Wiltshire (828 km$^2$ of 3485 km$^2$). The Sharp Sand and Gravel ACA, Soft Sand ACA and Crushed Rock ACA comprise 11%, 10%, and 3% of Wiltshire respectively. A designated site is defined by PPS 5, as a World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated as such under the relevant legislation.The number of designated sites

within Wiltshire and the ACAs are shown in Table 5.3 below, and designated sites within the ACAs are detailed on Fig. 9. The level of designated sites, and if higher or lower than expected based on the area of the ACA, is discussed by site-type below.

Table 5.3 Designated Sites within the Land Based ACA

| **Designation** | **Wiltshire** | **Sharp Sand and Gravel ACA** Actual (% of Total) *Density ($km^2$)* | **Soft Sand ACA** Actual (% of Total) *Density (km2)* | **Crushed Rock ACA** Actual (% of Total) *Density ($km^2$)* | **All ACAs** Actual (% of Total) *Density ($km^2$)* |
|---|---|---|---|---|---|
| Area | 3485 $km^2$ | 398 $km^2$ (11%) | 342 $km^2$ (10%) | 88 $km^2$ (3%) | 828 $km^2$ (24%) |
| Scheduled Monuments | 1477 | 183 (12%) *0.46* | 51 (3%) *0.15* | 17 (1%) *0.19* | 240 (16%) *0.29* |
| Listed buildings (all grades) | 12884 | 1860 (14%) *4.67* | 1013 (8%) *2.96* | 323 (3%) *3.67* | 3121 (24%) *3.77* |
| Grade I Listed buildings | 292 | 72 (25%) *0.18* | 30 (10%) *0.08* | 6 (2%) *0.07* | 108 (37%) *0.13* |
| Grade II* Listed buildings | 710 | 112 (16%) *0.28* | 41 (6%) *0.12* | 6 (1%) *0.07* | 154 (22%) *0.19* |
| Grade II Listed buildings | 11802 | 1175 (10%) *2.95* | 932 (8%) *2.73* | 311 (3%) *3.53* | 2858 (24%) *3.45* |
| Registered Parks and Gardens (all grades) | 43 | 21 (50%) *0.05* | 9 (21%) *0.03* | 3 (7%) *0.03* | 29 (67%) *0.04* |
| Grade I Registered Park | 7 | 2 (29%) *0.005* | 3 (43%) *0.008* | 1 (14%) *0.01* | 6 (86%) *0.007* |
| Grade II* Registered Park | 10 | 7 (70%) *0.018* | 3 (30%) *0.008* | 1 (10%) *0.01* | 8 (80%) *0.009* |
| Grade II Registered Park | 26 | 12 (46%) *0.03* | 3 (12%) *0.008* | 1 (4%) *0.01* | 15 (57%) *0.018* |
| Registered Battlefields | 1 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| World Heritage Sites | 1 | 1 (100%) | 0 (0%) | 0 (0%) | 1 (100%) |

*Scheduled Monuments*

5.10 A marginally higher percentage of Scheduled Monuments is recorded in the Sharp Sand and Gravel ACA. These include concentrations of Scheduled Monuments in the Kennet Valley and the northern area of the Salisbury Avon. Scheduled Monuments appear to be underrepresented in the Soft Sand and Crushed Rock ACAs.

*Listed buildings*

5.11 A marginally higher percentage of Listed buildings is recorded in the Sharp Sand and Gravel ACA. In the southern and eastern areas of Wiltshire the distribution of Listed buildings is focused on the river valleys of the Kennet and the Salisbury Avon. The percentage of Grade II Listed buildings in this ACA is slightly lower than might be expected, perhaps a result of the exclusion of urban areas where such monuments are often found in dense groups.

5.12 Listed buildings are underrepresented in the Soft Sand ACA, a result of the lower number of Grade II* and II Listed buildings in this area. The expected percentage of Listed buildings is recorded in the Crushed Rock ACA. The percentage of Grade I

and II* Listed buildings is slightly lower than expected but the expected level of Grade II Listed buildings is recorded.

*Registered Parks and Gardens*

5.13 A higher percentage of Registered Parks and Gardens is recorded in all the ACAs. This is reflected in not only the number of Registered Parks and Gardens which cross into the ACAs (see Table 5.3 above), but also in the areas covered. Registered Parks and Gardens in Wiltshire and Swindon comprise a total of 85km$^2$, comprising 2% of its total area. Of this 35km$^2$ are within the ACAs, comprising 4% of their total area.

*Registered Battlefields*

5.14 The single Registered Battlefield recorded in Wiltshire does not cross into any of the ACAs.

*World Heritage Sites*

5.15 The Stonehenge, Avebury and associated sites World Heritage Site crosses into the Sharp Sand and Gravel ACA. The World Heritage Site is divided into two areas. The northern area, focused on Avebury, crosses into the Kennet AS-A, and the southern area, focused on Stonehenge, crosses into the Salisbury Avon AS-A.

**Palaeolithic (c. 900,000 BC to 10,000 BC)**

***Introduction and chronology***

5.16 The Palaeolithic covers a very long period of time, falling within the Pleistocene geological epoch of the Quaternary period, and shares more in common with broader geological time-frames than later archaeological periods. The Palaeolithic spans a period of over half a million years, beginning with the earliest known human occupation of the British Isles recently dated to c. 700,000 BP (Parfitt et al 2005), and ending with the transition to the Mesolithic at around 10,000 BC. The study of the Palaeolithic is essentially the study of the earliest hunter-gatherer societies through the survival of their most resilient tools; lithics. The British Isles was populated intermittently during this period, as human populations reacted to episodic glacial advances (Wymer 1999, 2). As a result of harsh climatic conditions, the British Isles was devoid of human life throughout the many long glacial maximums (Cunliffe 1993, 6).

5.17 The Palaeolithic is broadly divided into the Lower, Middle and Final Upper Palaeolithic, and these divisions are based on distinctive lithic assemblages and hominin species. The Lower Palaeolithic spans the period between c. 900,000-250,000 BC and is characterised by the presence of early hominin species such as *Homo erectus* and *Homo heidelbergensis*. The Middle Palaeolithic spans c. 250/200,000-40,000 BC and is defined by the presence of Neanderthals (Homo neanderthalensis). The Upper Palaeolithic, from approximately 40,000 BC onwards, marks the arrival of anatomically modern humans, and the use of distinctive blade (rather than flake) technologies. The Upper Palaeolithic is further subdivided into the Early Upper Palaeolithic and the Late Upper Palaeolithic, before and after the Last Glacial Maximum c. 18,000 BP (Hosfield 2007, 44). This increasingly detailed chronology is the result of a greater palaeoenvironmental evidence base, and the adoption of an increasingly archaeological, rather than geological, approach. Oxygen Isotope Stages (OIS) are commonly used to quantify the Palaeolithic. These stages reflect fluctuation between cool and warm temperatures, defined through the study of ocean-bed cores (Wymer 1999, 2). A simplified chronology of the

Palaeolithic with reference to OIS is presented in Table 5.4, although it should be noted that this has been based on the traditional start date of c. 500,000 BP.

5.18 Evidence of Palaeolithic activity is generally confined to the survival of durable materials such as stone and very occasionally bone (including hominin). Stone artefacts predominantly consist of worked flints, but also other materials such as chert or quartzite (Webster 2007, 280). The handaxe is the most common lithic form of the Palaeolithic, and would have served as a multi-function tool (Darvill 1987, 31).

5.19 Wymer (1999, 12) identified five particular contexts in which Palaeolithic remains may be identified: river terrace gravels; head deposit; raised beaches; brickearth and surface discoveries. To this may be added cave sites. Palaeolithic deposits can be identified as either *in situ* remains or as finds within secondary contexts. The latter context is far more common in the British Isles due to glacial and geomorhpological processes which occurred during the period. Deposits typically comprise worked lithics redeposited along with other material (including silts, sands and gravels). *In situ* remains are much rarer, but where identified are commonly extremely informative and nationally significant, the site of Boxgrove in Sussex (a raised beach site) being the most well-known. Within Wiltshire the *in situ* remains recorded at Harnham are particularly significant (WHER SU12NE011; outside the study area), as the site contained a sequence of Pleistocene sediments dated to approximately 275,000 years BP with three separate horizons containing undisturbed or minimally disturbed artefacts (Whittaker *et al* 2004). Cave sites are also significant as they may also preserve *in situ* Palaeolithic deposits, and may have served as occupation sites or the focus of other activity. Raised beaches and cave sites do not occur within the study area River terraces make up a large proportion of the study area, and brickearths and head deposits also occur.

Table 5.4 Chronology for the Lower, Middle and Upper Palaeolithic (after Wymer 1999, table 2; Barton 1997, Figs. 15, 35-37; and Hosfield 2007, table 2.1.)

| **OIS** | **Years BP** | **British Quaternary Stage** | **Climate** | **Archaeological Period** |
|---|---|---|---|---|
| 2 | 24,000-13,000 | Devensian | Mainly cold | Upper Palaeolithic |
| 3 | 59,000-24,000 | | | |
| 4 | 71,000-59,000 | | | Middle Palaeolithic |
| 5a-d | 117,000-71,000 | | | |
| 5e | 128,000-117,000 | Ipswichian | Warm | |
| 6 | 186,000-128,000 | Wolstonian | Cold | |
| 7 | 245,000-186,000 | | Warm | |
| 8 | 303,000-245,000 | | Cold | Lower Palaeolithic |
| 9 | 339,000-303,000 | | Warm | |
| 10 | 362,000-339,000 | | Cold | |
| 11 | 423,000-362,000 | Hoxnian | Warm | |
| 12 | 478,000-423,000 | Anglian | Cold | |
| 13 | 524,000-478,000 | Cromerian | Warm | |

5.20 Palaeolithic evidence from Wiltshire generally comes from such surface and river terrace deposits, commonly identified during the quarrying of the river gravels (Hosfield 2007, 42). These finds can occasionally be dated to a particular phase of the Palaeolithic, but the majority of the lithic record lacks chronological distinction, with hand axe forms spanning the whole period (Hosfield 2007, 39).

5.21 The current river systems, and their associated gravel terraces, are mainly formations of the post-glacial period (since c. 12,000 BP). But, these build upon and develop upon earlier systems, such as the Severn and Thames which were

connected east-west, while the south-flowing rivers in Wiltshire connected to the Channel River. So far, no *in situ* Palaeolithic sites are recorded on the gravels in Wiltshire, but there is the potential for Upper Palaeolithic sites on the main river systems, especially on cut-offs and along old river courses. The material in the river terrace gravels derives from the erosion of higher ground. Sourcing the key components of the gravels is an important area for future research and might help establish the 'biography' and taphonomy of a find or assemblage. Some items are likely to have been transported a considerable distance from their original deposition location. Palaeolithic sites recorded within the study area are detailed on Fig. 10.

***Monument density***

5.22 The monument density of Palaeolithic sites recorded in Wiltshire is relatively low at 0.06 per $Km^2$, and this reflects the pattern throughout the British Isles where such finds are generally rare. Twenty sites are recorded within the Sharp Sand and Gravel ACA, resulting in a monument density of 0.05 per $km^2$. Within this ACA the Kennet AS-A and the Avon AS-A show higher than average densities. The Kennet Valley probably offered a convenient corridor of movement, providing access to the east, where it flows into the Thames, as well as access to the west of England through the Vale of Pewsey (Froom and Cook 2005, 1). The Avon Valley would have offered access to the south coast.

5.23 The Soft Sand ACA has a density of 0.03 per $km^2$, with the highest densities in the Central East AS-A and the South East AS-A. The South-West AS-A does not show a particularly high density, which contrasts to its particularly high density of lithic finds for the succeeding Mesolithic and Neolithic periods.

5.24 Particular densities of Lower Palaeolithic finds have been recorded from the urban area of Salisbury (Roe 1969, 3; Cunliffe 1993, 6), although as an urban area this is outside of the study area of the current project. It has been suggested that this location, at the confluence of four rivers, would have been an obvious focus for Palaeolithic communities (Wymer 1999, 113), explaining the high number of finds.

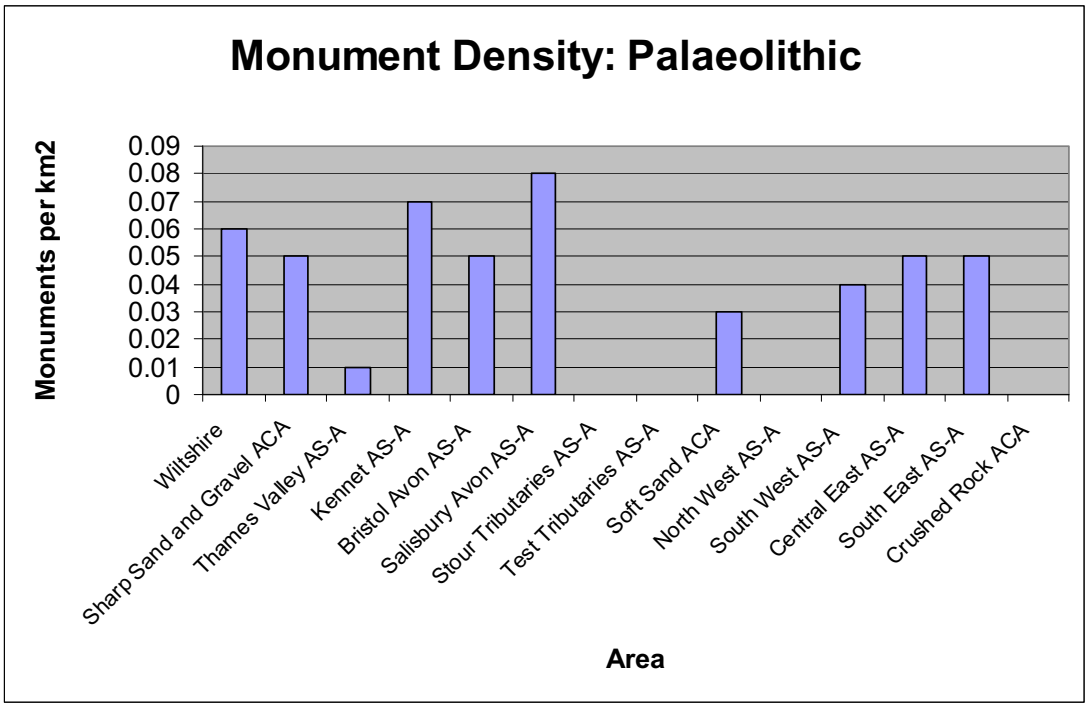
5.25 Across the study area as a whole, Palaeolithic assemblages are predominantly found in river terrace deposits, as would be expected. It is therefore unsurprising that no sites are recorded in the Crushed Rock ACA, predominantly consisting of limestone uplands.

5.26 The densities provided here were produced from a relatively small sample size of 31 records for the study area. Therefore the discussion of monument densities is inherently limited and should not be taken as representative of Palaeolithic activity within the ACAs.

Table 5.5 Monument Density: Palaeolithic

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 209 | 0.06 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 20 | 0.05 |
| Thames Valley AS-A (78 km$^2$) | 1 | 0.01 |
| Kennet AS-A (43 km$^2$) | 3 | 0.07 |
| Bristol Avon AS-A (83 km$^2$) | 4 | 0.05 |
| Salisbury Avon AS-A (178 km$^2$) | 12 | 0.08 |
| Stour Tributaries AS-A (10 km$^2$) | 0 | 0.00 |
| Test Tributaries AS-A (6 km$^2$) | 0 | 0.00 |
| Soft Sand ACA (342 km$^2$) | 11 | 0.03 |
| North West AS-A (95 km$^2$) | 0 | 0.00 |
| South West AS-A (160 km$^2$) | 7 | 0.04 |
| Central East AS-A (21 km$^2$) | 1 | 0.05 |
| South East AS-A (66 km$^2$) | 3 | 0.05 |
| Crushed Rock ACA (88 km$^2$) | 0 | 0.00 |

Graph 5.2 Monument Density: Palaeolithic




### *Un-diagnostic finds*

5.27 Many of the Palaeolithic finds from within the study area have not been assigned to a particular phase of the period, primarily due to a lack of dating evidence and the prevalence of the handaxe form throughout the Palaeolithic. The majority of Palaeolithic finds are of flint, although chert handaxes have been identified at Bugley Barton Farm (WHER ST84SW001) in the South-West AS-A and at Brook Farm, Hankerton (AMIE 887801; WAM 1982, 174) in the Thames Valley AS-A. Relatively undiagnostic flake tools are common Lower and Middle Palaeolithic finds, and at the Bypass Bridge, Melksham, in the Bristol Avon AS-A several large flakes were identified with ochreous strains (WHER ST86SE001; WHER ST96SW001; WAM 1973, 126). Ochre is perhaps indicative of non-utilitarian, primarily decorative, activities, and has been identified in Palaeolithic burial contexts (Darvill 2010, 35).

5.28 Many Palaeolithic artefacts remain loosely dated, but where chronologically defined, the Lower Palaeolithic, characterised by Acheulian handaxes, seems to be better represented within the ACAs, and Wiltshire as a whole (Roe 1969, 7).

***Lower Palaeolithic (c. 900,000-250,000 BC)***

5.29 The earliest artefacts of the Lower Palaeolithic are formed by Clactonian assemblages of worked lithics which are characterised by the absence of handaxes (McNabb 2007, 248). No such deposits have been recorded within the study area, and the following discussion focuses on the Acheulian assemblages of the Lower Palaeolithic.

5.30 Flint handaxes are the most common Palaeolithic find, and the Acheulian ovate handaxe tradition is the most distinctive form of the Lower Palaeolithic. These axes are most commonly found as surface finds or as residual material preserved by River Terrace gravels (Hosfield 2007, 39). Although items found in river terraces are stratified deposits, they are not normally *in situ* and are secondary contexts derived from geological processes (although the evaluation at Harnham in 2001 indicates that *in situ* remains can survive). It has also been suggested that Palaeoliths are most commonly located in deposits underlying River Terraces rather than within the terrace deposits proper (Wymer 1999, 21).

5.31 Acheulian handaxes are distinctive to the Lower Palaeolithic and have been recorded from across the Sharp Sand and Gravel ACA and Soft Sand ACA. Confirmed examples have been recorded at Granham Hill (AMIE 969746) and north of West Kennet Long Barrow (WHER SU16NW001) both in the Kennet AS-A, north of the Church at Fovant (WHER SU02NW003) in the South-West AS-A, and at the Vera Jeans Nature Reserve (WHER SU16SE005) and Britford (AMIE 217674) both in the Salisbury AS-A. Acheulian handaxes are often found in groups, and three were recorded from Dinton Brickworks (WHER SU03SW003) in the Salsibury Avon AS-A, while a further group has been recorded close to Lightlane Plantation (WHER SU12NE001) also in the Salisbury Avon AS-A. Further Acheulian implements, including handaxes and broad flakes, were found in 1865 from the gravel deposits at Lake (AMIE 218345; WHER SU13NW001) in the Salisbury AS-A.

5.32 A significant group of Acheulian handaxes was identified during survey ahead of the A36 Salisbury Bypass (WHER SU03NE001; SU03NE002; SU03NE003) in the Salisbury Avon AS-A. The recovery of one of these axes from a clay upland site, along with other discoveries on a national scale, suggests that the occupation of uplands by Palaeolithic hunters was greater than previously considered (Harding 1995, 122). The remaining handaxes were located within gravel deposits and could relate to vestigial fluvial gravel terraces on the valley side of the river Wylye (ibid). The recorded handaxes are unlikely to be contemporary, and there are probably more axes undiscovered in the area.

5.33 Perhaps the most significant Lower Palaeolithic site within the study area was found close to Sutton Bengar (WHER ST97NE001; AMIE 1071630; AMIE 212252) within Terrace Gravel deposits of the Bristol Avon AS-A. During mechanical excavation a Lower Palaeolithic Acheulian pointed handaxe was found below 2.8m of gravel, associated with the remains of horse, wolf and elephant. These remains may relate to probable prey targeted by Palaeolithic communities, although the redeposited context means this is not certain.

5.34 The relatively widespread distribution of Lower Palaeolithic handaxes is illustrated by their occurrence within otherwise sparsely populated Palaeolithic regions.

Handaxes of probable Acheulian tradition have been found from Farleigh Down (AMIE 1071602) in the Crushed Rock AS-A, from Doddsdown Wilton Common (AMIE 1073746) in the Central East AS-A, and from Brook Farm (WHER ST99SE001; AMIE 1071633) in an area of Oxford Clays in the Thames Valley AS-A.

5.35 Finds from Ashlade Firs (AMIE 1074690; WHER SU26NW002) Savernake, in the Kennet AS-A, were possibly associated with the significant assemblage recorded at Knowle Farm Pit 2km to the east of the site. At Knowle Farm Pit several hundred Lower Palaeolithic Acheulian ovate handaxe specimens have been recovered from within the Lower Terrace Gravels (Roe 1969, 4). The site is considered one of the most prolific hand axe sites in the country, and axes have been recovered from many levels of fluvial deposits on the edge of the Kennet Valley (Cunliffe 1993, 11). The gravels at Knowle Farm Pit are extremely deep and the assemblage included waste pieces, suggesting a working floor nearby (Froom 1983, 31). The lithics from the site do not represent a single industrial tradition, and instead points towards many sites, perhaps quite chronologically divergent, brought together by geological processes (Ibid, 37).

5.36 The Lower and Middle Palaeolithic archaeology of Wiltshire is dominated by open-landscape findspots associated with the Salisbury Avon and its tributaries (Hosfield 2007, 41). In addition to these river valley deposits, there are also a small number of surface sites (on the chalk or clay-with-flints) fringing the valleys. The Lower Palaeolithic is relatively well represented (possibly due to the large chronological period it represents) when compared to the Middle and Upper Palaeolithic. However, the relative lack of finds from the Middle and Upper Palaeolithic may reflect a lack of systematic research and analysis rather than a true absence of habitation or suitable deposits.

***Middle Palaeolithic (c. 250/200,000-40,000 BC)***

5.37 The Middle Palaeolithic is not as well represented within the study area or the county as a whole. In general, the Middle Palaeolithic may be characterised by a general decline in hand axe forms (Hosfield 2007, 24), although the flat-based handaxes are particularly diagnostic of the Middle Palaeolithic, especially the *bout coupé* style of the Mousterian tradition (Cunliffe 1993, 11). An example of the *bout coupé* handaxe was recovered from Compton Park (WHER SU03SW001) in the Salisbury AS-A, while further diagnostic Mousterian implements have been recorded close to Lodge (WHER SU12SE002) in the South-East AS-A and from Horse Shoe Copse (AMIE 214723) in the South-West AS-A. The Mousterian tradition is primarily associated with Neanderthal activity (Darvill 2010, 40), and *bout coupé* axes may specifically relate to the re-colonisation of the British Isles by Neanderthal communities (White and Jacobi 2002, 109).

5.38 The handaxe found to the north of West Kennet Long Barrow (WHER SU16NW001) in the Kennet AS-A has been interpreted as an example of the Middle Palaeolithic *bout coupé* tradition (Holgate and Tyldesley 1985, 225). Elsewhere in the county, a Mousterian *bout coupé* axe recorded from Fisherton was associated with the remains of mammoth (Evans 1872, 551), and provides a glimpse of the activities, most likely hunting, that were being undertaken by Neanderthal communities within the county.

***Upper Palaeolithic (c. 40,000 – 10,000 BC)***

5.39 The Upper Palaeolithic is defined by the appearance of Anatomically Modern Humans (AMH) and the proliferation of blade technologies (Barton 1997, 99). These blade forms, produced from a specially prepared platform core, mark a distinct

transition from preceding flake technologies, and are probably directly related to the appearance of AMH (Darvill 1987, 35). The Upper Palaeolithic also sees significant cognitive developments, including the use of decoration, social interaction and organisation, complex hunting strategies and the ritualised treatment of the dead (Barton 1997, 98). The 'long blade' assemblages of the terminal Palaeolithic are highly distinctive, but share much in common with Mesolithic assemblages, and there is difficulty in distinguishing long blades chronologically (Barton 1998, 158).

5.40 The archaeology of the Upper Palaeolithic is dominated by cave sites. Although open-air findspots are also known, cave sites may be seen as of particular importance as they potentially preserve occupation sites and combine lithic and faunal assemblages (Hosfield 2007, 47). As the geology of the ACAs is generally not conducive to the formation of cave sites, it is unsurprising that the period is not particularly well represented.

5.41 Few open sites of the Upper Palaeolithic are known within the study area, but isolated tools of the period have been recorded. A probable graver has been identified at Lower Seagry, near Chippenham (WHER ST98SE001; Tucker 1985, 226) in the Bristol Avon AS-A, while four Middle to Upper Palaeolithic scrapers from close to the Dinton Brickworks (AMIE 214798) and a biface tool from Fir Hill, Fovant, of probable Upper Palaeolithic in date (WHER SU02NW002; Tucker 1985, 227) have been recorded in the South-West AS-A. The rarity of Upper Palaeolithic finds is not difficult to explain given the hostile environmental conditions of the period (Ibid), and the communities that did exist were probably operating out of sheltered valley sites and caves.

***Conclusions***

5.42 The main type of evidence for the Lower, Middle and Upper Palaeolithic comprises worked lithics mainly derived from river terraces, with finds deeply stratified below accumulated sand and gravel deposits. Within the study area, Palaeolithic finds are most commonly recorded within the main river valleys, in particular the Salisbury Avon AS-A and Kennet AS-A (see Graph 5.2). This distribution would be expected due to the greater probability of Palaeolithic finds within river terrace deposits, and this is reflected by the fact that the vast majority of residual Palaeolithic finds are revealed by aggregate extraction within river terrace deposits. No *in situ* Palaeolithic sites occur within the study area, which is perhaps not unexpected due to the absence of raised beach and cave sites. However, significant *in situ* remains have been recorded from close to the study area, as at Harnham (WHER SU12NE011), just outside the Sharp Sand and Gravel AS-A within the Salisbury urban zone. It is important to note that such remains are preserved *within* the aggregrate deposits.

5.43 The Lower Palaeolithic, with its distinctive Acheulian axes, is perhaps best represented within the study area. Conversely, the Middle and Upper Palaeolithic remain relatively elusive in terms of residual artefacts and stratified sites.

**Mesolithic (c. 10,000 – 4,000 BC)**

***Introduction and chronology***

5.44 The transition from the Upper Palaeolithic to the Early Mesolithic at the end of the last Ice Age approximately 10,000 years BC broadly marks the beginning of the Holocene epoch. The Mesolithic period spans the following four millennium to the start of the Neolithic around 4000 years BC. The period is generally split into the Early and Late Mesolithic on the basis of tool types; with broad blade (often

obliquely blunted) assemblages dated to the Early Mesolithic and narrow blade 'microlith' assemblages dated to the Late Mesolithic.

5.45 The Early and Late Mesolithic are also characterised by differing environmental conditions, with rapid change, including sea level rise, in the Early Mesolithic followed by increasing stability in the Late Mesolithic. The period witnessed dramatic environmental changes, and the warming climate at the beginning of the Holocene epoch resulted in the introduction of new flora and fauna species, during which the coast and river systems became prominent focuses of activity. As the climate warmed the open tundra landscape was gradually populated by birch and pine, and subsequently by deciduous woodlands. It was was possibly during the Mesolithic, approximately 7500 years BP that the English Channel flooded and severed the land bridge which had connected the Britain Isles to the continent (Coles 1998). However, recent work by the Doggerland project has suggested that the link with the continent might have remained open until the early Neolithic.

5.46 Accounts of Mesolithic environmental conditions are fairly generalised, and there have only been a few detailed palaeoenvironmental studies within Wiltshire (Hosfield 2007, 38). The development of woodland conditions has been proven by molluscan sampling of tree-throw pits at Avebury, Easton Down and South Street, and the succession to a full woodland environment has been dated to approximately 7500 cal BC in the Upper Kennet Valley (Evans *et al* 1993). A similar 8th millennium BC date for the woodland expansion was obtained from floodplain deposits close to Durrington Walls, in the Avon valley (Scaife 2004).

5.47 Mesolithic communities are typically seen as nomadic, adopting hunter-gatherer economic strategies, aimed at exploiting changing environmental conditions (Barton and Roberts 2004, 340). By necessity, communities probably exploited a wide range of resources, and a strong vegetative staple to the diet is suggested by the prevalence of hazel nuts at many Mesolithic sites. Such assemblages suggest an adaptive ability on behalf of Mesolithic communities to exploit changing environmental conditions, and it is increasingly realised that activity may have included aspects of landscape modification. The use of fire would probably have been central to these efforts (Cunliffe 1993, 32), although difficult to detect archaeologically. In the Avebury region in particular, in the upper reaches of the Kennet AS-A, it has been argued that late Mesolithic communities may have been involved in early cereal cropping and even barrow building (Smith 1984, 99). As such, the late Mesolithic construction of monuments cannot be ruled out.

5.48 Mesolithic finds largely consist of worked lithics, predominantly flint, and comprise various tool types including microliths, cores, blades, knives and scrapers. The distinctive Late Mesolithic microlith forms mark a significant departure from earlier 'Broad blade' tool-producing technologies and probably comprised part of wooden-hafted composite tools. Mesolithic artefacts are predominantly recovered from unstratified contexts (Cunliffe, 1993, 23), normally as relatively small surface scatters, indicative of transitory Mesolithic knapping sites. Occasionally, larger Mesolithic assemblages are identified and these probably related to larger, seasonally occupied sites. Far less frequently Mesolithic artefacts are recovered from stratified soil horizons, often below rapidly forming peat deposits. Cave sites may also preserve significant *in situ* Mesolithic deposits, but no cave sites are recorded within the study area and the underlying geology makes their presence unlikely. Mesolithic sites are illustrated on Fig. 11.

### *Monument density*

5.49 The evidence of Mesolithic activity in Wiltshire has been suggested to have a distinctly riverine distribution; with clusters of finds in south Wiltshire (in the Salisbury environs) and in the north-eastern and north-western parts of the county (Hosfield 2007, 57). The evidence from the ACAs broadly confirms this distribution. It should be borne in mind, however, whilst comparing the distribution of surface lithic sites, that these may not directly reflect activity of populations during this period. Other factors may also influence distribution of recorded finds, such as variations in amounts of research in different areas (some local societies, for instance, actively carry out fieldwalking programmes recording lithic sites).

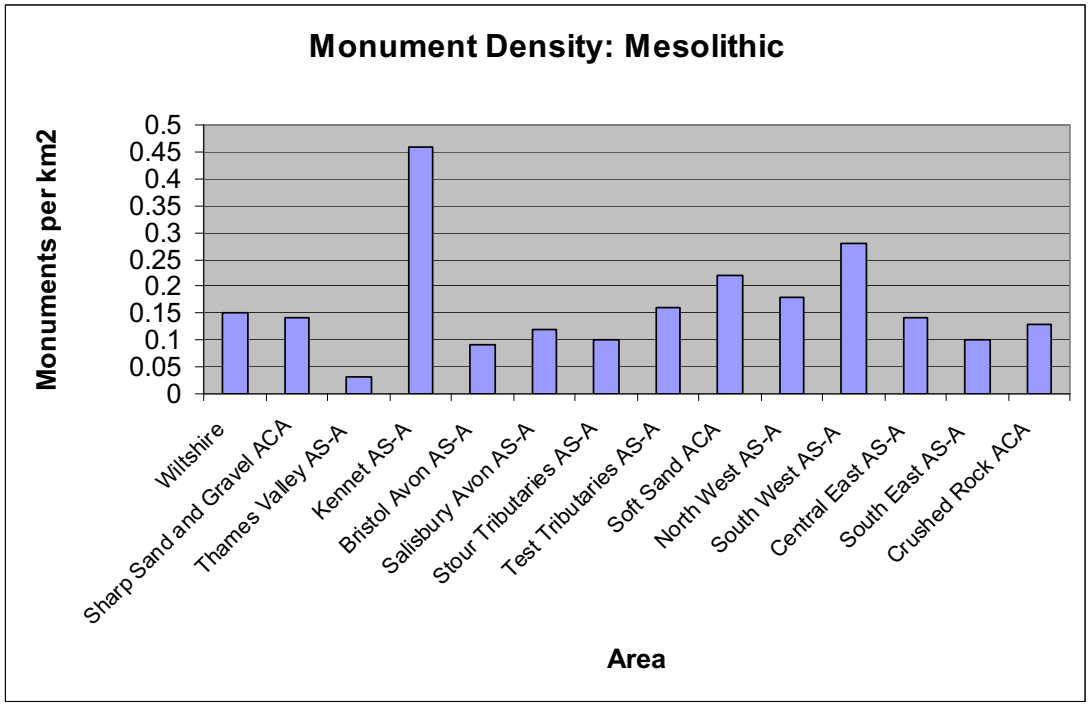
5.50 Wiltshire has a relatively high level of recorded Mesolithic sites at 0.15 per km$^2$. Both the Crushed Rock ACA and the Sharp Sand and Gravel ACA have densities just below the county average, of 0.13 per km$^2$ and 0.14 per km$^2$ respectively. Within these ACAs the Kennet AS-A has an especially high density of Mesolithic finds, at 0.46 per km$^2$, and appears to have been a particular focus of Mesolithic activity. Within the relatively low density of Mesolithic finds from the Crushed Rock ACA there is a minor concentration in the southern part of the ACA.

5.51 The Soft Sand ACA has a density of 0.22 per km$^2$, above the county average. It is unclear why the Soft Sand ACA has a high density, with particularly dense concentrations of Mesolithic finds in the South West and North West AS-As. The concentration in the South West AS-A focuses on the Upper Greensands geology between the Vale of Wardour to the north and the higher ground of Cranbourne Chase to the south. This density is perhaps due to the AS-A's location above the valley of the River Nadder, whilst also in proximity to the higher ground of Cranbourne, offering a diverse range of exploitable environments. The second concentration within the North West AS-A, located on Lower Greensands geology, is situated in a similar topographical context, between the lowland of the Avon Vale to the west and the higher ground of Marlborough Downs to the east.

Table 5.6 Monument Density: Mesolithic

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 532 | 0.15 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 54 | 0.14 |
| Thames Valley AS-A (78 km$^2$) | 2 | 0.03 |
| Kennet AS-A (43 km$^2$) | 20 | 0.46 |
| Bristol Avon AS-A (83 km$^2$) | 8 | 0.09 |
| Salisbury Avon AS-A (178 km$^2$) | 22 | 0.12 |
| Stour Tributaries AS-A (10 km$^2$) | 1 | 0.1 |
| Test Tributaries AS-A (6 km$^2$) | 1 | 0.16 |
| Soft Sand ACA (342 km$^2$) | 74 | 0.22 |
| North West AS-A (95 km$^2$) | 18 | 0.18 |
| South West AS-A (160 km$^2$) | 46 | 0.28 |
| Central East AS-A (21 km$^2$) | 3 | 0.14 |
| South East AS-A (66 km$^2$) | 7 | 0.1 |
| Crushed Rock ACA (88 km$^2$) | 11 | 0.13 |

Graph 5.3 Monument Density: Mesolithic




***Surface finds***

*Single and multiple lithic finds*

5.52 Residual Mesolithic flint assemblages have been recorded widely across the study area, and provide a general 'background' distribution indicative of Mesolithic activity. The majority of Mesolithic sites are known largely as surface flint scatters, which depending on the size of the assemblage, may represent seasonal camps and permenant settlements. Such sites probably formed part of a wider network of camps used to exploit diverse woodland and riverine resources (Cunliffe 1993, 29).

5.53 Particularly large assemblages of Mesolithic material have been identified at Donhead St Mary (AMIE 210639) in the South West AS-A including flint and gritstone axes as well as an arrowhead, and a vast assemblage of Mesolithic flints was identified at Rowberry Farm (WHER ST92SW060) also within the South West AS-A. Both of these assemblages were recorded in the vicinity of identified flint working sites, and suggest an intense area of Mesolithic activity in the South West AS-A.

5.54 It has been argued river terraces served as foci for Mesolithic communities, and a cluster of sites in the Kennet Valley show that Mesolithic communities were active on gravel terraces, probably hunting deer, pig and aurochs (Evans *et al.* 1993). However, the Salisbury Avon and Bristol Avon AS-A have lower densities of finds, while the Stour and Thames valley AS-As show very low concentrations. These low densities of finds perhaps suggest that certain river valleys were more intensively utilised by Mesolithic communities, and their selection depended on more than just proximity to watercourses. The scarcity of finds from the Thames AS-A is especially surprising given the potential of identified tufa deposit sites (Parker and Goudie 1998) to produce Mesolithic finds, and could rather be the result of a lack of systematic study.

5.55 Although there are concentrations in some river valleys within the Sharp Sand and Gravel ACA, notably the Kennet AS-A, there is a greater concentration of finds from

the Soft Sand ACA, from areas situated on higher ground overlooking the river terraces. Within the Soft Sand ACA, the South-West AS-A has a noticeably higher density of Mesolithic finds, the possible reasons for which have been discussed above.

5.56 Mesolithic finds are frequently derived from surface collection, either as single finds or as parts of wider assemblages. Such residual finds are often found in conjunction with Neolithic and Bronze Age material, highlighting the difficulty of trying to establish chronological distinctions within un-stratified assemblages. For example, the flint assemblage recovered at Countess Roundabout (WHER SU14SE054), within the Salisbury AS-A, has a typically broad date range extending into the early Neolithic, while the assemblage recorded at Broom Park (WHER SU22SE050) in the South-East AS-A contained Bronze Age elements. Putative Mesolithic finds have also been re-classified as the chronological framework is gradually refined, such as the core identified in West Overton parish (WHER SU16NW053) in the Kennet AS-A, now believed to be Neolithic in date. Sustained research is therefore required to provide a greater resolution to lithic-based chronologies of the Mesolithic. A further complication is that evidence of Mesolithic activity often comes from excavations primarily aimed to investigate later features, such as the large Mesolithic assemblage identified during the excavations of the Roman villa at Littlecote Park (WHER SU27SE070).

5.57 The recorded distribution of residual finds within the study area must only partially reflect the true extent of Mesolithic activity. However, the densities recorded within the Soft Sand ACA and the Kennet AS-A do seem to reflect genuine concentrations of Mesolithic activity in preferred topographical contexts.

*Flint working scatters*

5.58 Within the ACAs two Mesolithic flint working sites have been identified by the Wiltshire HER, both within the Soft Sand South West AS-A, located close to Ludwell (WHER ST92SW073) and Bishopstow (WHER ST84SE051). The Ludwell site is perhaps the most convincing as a Mesolithic flint working site, producing a large concentration of blades, flakes, cores and pot boilers. Further industrial sites have been suggested from the NMR data at Windwhistle (AMIE 206549) also in the South West AS-A and at Coate Water Park (WHER SU18SE057, AMIE 588001) within the Thames Valley AS-A.

5.59 Evidence of flint working has also been identified at further sites, in the form of waste flakes, but have not been classified as industrial sites by either the HER or NMR. At what stage such assemblages constitute a flint working site has not been formally defined and further research is required to determine the exact characteristics of flint working sites. The North West AS-A contains many assemblages containing waste flakes, but not formally defined by the WHER as flint working sites, such as at Freeth Farm (WHER SU07SW055) and Chittoe (WHER ST96NW050) where well-struck blades as well as the associated cores were identified. In fact, it is likely that most sites where a reasonably-sized number of Mesolithic flints have been identified (particularly those including waste flakes) do represent flint working sites, even if of a small scale and temporary nature. In the Bristol Avon AS-A to the west of the above sites, a large assemblage of waste flakes from Whaddon (WHER ST86SE050) would suggest a further flint working site. The South West AS-A contains a large assemblage of chert and flint waste flakes in the vicinity of Tower Road (WHER ST73NE050), perhaps suggesting a further flint working site.

*Tranchet axes, mace-heads and adzes*

5.60 More unusual residual finds are tranchet axes, mace-heads and adzes, possibly linked to the modification of woodland environs, while the finer examples were possible indicators of social distinction. These tools, together with evidence of the cutting and burning of vegetation, are interpreted as a significant departure from previous practices as they signify an intentional manipulation of the environment. Stone maceheads have been recovered from Hurdcott House (WHER SU03SW054) in the Salisbury Avon AS-A, Dodsdown (WHER SU26SE050) in the North East AS-A and near to Ludwell Bridge (WHER ST92SW072) in the South West AS-A. A possible macehead was recorded from Bapton Water Meadow (WHER ST93NE050) in the Salisbury Avon. However, there are uncertainties over the dating of these finds, and they are only assumed to the Mesolithic in date.

5.61 Flint axes have been recovered from Middle Chase (WHER SU02NW054) in the South West AS-A, and from Ugford (WHER SU03SE053) and Sharcott (WHER SU15NE052) both in the Salisbury Avon AS-A. A broken flint axe is recorded from the Donhead St Mary region (WHER ST92SW064) in the South-West AS-A.

5.62 Tranchet axes are more common, and more securely dated to the Mesolithic, and have been identified from Freeth Farm (WHER SU07SW055) in the North West AS-A, Stonehill (WHER ST92NE052) in the South West AS-A and Castle Copse (WHER SU26SE051) in the North East AS-A. Tranchet axes appear to be especially common within the Sharp Sands and Gravels ACA, particularly the Salisbury Avon AS-A and the Kennet AS-A. Within the Salisbury Avon AS-A tranchet axes have been recorded at South Newton (WHER SU03SE052), Baverstock (WHER SU03SW051), Compton Park (WHER SU03SW053), near to Pewsey (WHER SU15NE051), near to West Sharcott (WHER SU15 NW051) and in Alderby parish (WHER SU12NE054). A further significant find from the Salisbury Avon AS-A was a 30cm long flint 'pick' found north of Hurdcott House (WHER SU03SW055). In the Kennet AS-A tranchet axes are recorded at Clatford (WHER SU16NE051), Ox Bottom (WHER SU16NE052), West Kennet (WHER SU16NW057), Knighton (WHER SU27SE050), Axford (WHER SU27SW057), and west of Chilton Farm (WHER SU37SW051).

5.63 Maceheads and flint axes appear to concentrate within the Sharp Sands and Gravels ACA, with two-thirds of these diagnostic forms recorded within the Salisbury Avon AS-A or Kennet AS-A. The use of non-native raw material has been proven elsewhere in the country (Evans *et al* 2007), and hints at mobility and increasingly complex social interactions. It can be argued that prominent waterways were acting as convenient routes of movement and communication for Mesolithic communities, and the exact provenance of Wiltshire maceheads certainly requires further research.

***Stratified sites***

*Mesolithic soils*

5.64 Stratified Mesolithic deposits are far less common, but form some of the most informative deposits recorded within the study area. Stratified deposits are most commonly found buried below rapidly forming peat horizons. Within the study area such peat accumulations are only associated with the major river valleys, often sealed within river terrace deposits. Such preserved Mesolithic remains are normally found at considerable depths, as at Peckingell (WHER ST97SW053), in the Bristol Avon AS-A, where the Mesolithic flint assemblage was at a depth of approximately 0.8m below accumulated soils, and at Hurdcott House (WHER SU03SW055), in the

Salisbury AS-A, where the aforementioned flint 'pick' was found below approximately 1m of accumulated peat. Further examples include Bapton Water Meadow (WHER ST93NE050), within the Salisbury Avon AS-A, where a relic bed c. 0.3m thick was identified between peat and clay horizons containing worked flints and a possible macehead.

5.65 Possible *in situ* Mesolithic material has been recovered during an evaluation at Tannery House, Downton (WHER SU12SE550), in the Salisbury Avon AS-A. Earlier excavations in the vicinity of Tannery House at Castle Meadow, Downton, recorded a substantial Mesolithic flint assemblage totalling 38, 000 flints largely consisting of waste flakes (suggesting a flint working site), below 0.3-0.5m of accumulated soil (Radley 1969, 18). Possible stratified Mesolithic flints have been recorded at Elcot (WHER SU16NE050) in the Kennet AS-A, while possible Mesolithic flints were recorded from a cut feature during excavations at Mary Street, Chippenham (AMIE 1444367) within the Bristol Avon AS-A.

5.66 Buried Mesolithic soils have been recorded from near to Avebury Trusloe (WHER SU06NE055) in the Kennet AS-A. Further buried soils have been identified at two locations in the Salisbury Avon AS-A. Firstly in the Bourne Valley (WHER SU13NE550) where a layer of stone pot-boilers was recorded below c.0.9m of peat, and secondly to the west of Countess Roundabout (WHER SU14SE054) where a buried soil contained Late Mesolithic and Early Neolithic flints. Such sites illustrate the potential for buried soils to contain highly informative Mesolithic remains.

*Mesolithic structures*

5.67 The evidence for Mesolithic structures is slight, and only a handful of simple, probably thatched-roof structures, have been recorded in Britain (Darvill 2010, 63). Excavations at Castle Meadow, Downton (Higgs 1959), in the vicinity of the Tannery Down excavations in the Salisbury Avon AS-A, identified a Mesolithic working floor, tool manufacture and distinct activity areas, associated with a probable light-weight structure. No such structures have formally been identified within the ACAs.

*Monumental sites*

5.68 Evidence for Mesolithic monumentality is rarer still, primarily because there are very few dated features, although three substantial postholes identified in the Stonehenge area (outside the study area), and dated to 8090-6590 cal BC, form the most convincing evidence yet. No such features have been identified within the ACAs, although a Mesolithic orgin has been suggested for certain barrows in the Avebury region (Smith 1984, 113).

*Tufa deposit sites*

5.69 Mesolithic deposits have previously been recorded in association with tufa deposits, which are formed by the chemical deposition of calcium in fresh water. These tufa deposits can contain, seal or be associated with Mesolithic archaeology, as identified in the Mendips Hills. Rich assemblages of faunal remains have been found at tufa sites, possibly drawn to the location by fresh water, and such faunal assemblages provide an obvious explanation for the presence of Mesolithic activity. The excavations at Cherhill (Evans and Smith 1983) just beyond the boundary of the North West AS-A, identified Mesolithic occupation material within a tufa deposit. The site contained evidence of flint working, sarsen stones, charcoal and animal bone, probably set within a closed woodland as suggested by pollen evidence. Similar tufa deposits have been mapped in the Upper Thames area (Parker and Goudie 1998), extending into the Upper Thames AS-A, and have yet to be investigated. The

current scarcity of Mesolithic finds recorded in the Upper Thames AS-A would suggest that further research is required.

***Conclusions***

5.70 Mesolithic deposits within the study area comprise two distinct types of site. The first type comprises un-stratified surface finds, which have generally been disturbed by later activities such as ploughing. These remains are predominantly identified as surface scatters during field walking exercises. These include sites with larger numbers of lithic material which probably represent flint working sites, as well as single finds, or small numbers of lithics (including axes and adzes), which probably represent different depositional processes including loss and disposal. Particular concentrations of these surface finds have been recorded in the South-West AS-A and the Kennet AS-A.

5.71 The second type of site comprises stratified Mesolithic deposits, which are much rarer. These may occur as deeply stratified finds sealed beneath peat deposits, or potentially beneath tufa deposits. Although rare, the former has been identified in the major river valleys including the Salisbury Avon AS-A and the Kennet AS-A. No domestic or monumental sites are recorded in the study area.

**Neolithic (c. 4,000 BC to 2,500 BC)**

***Introduction and chronology***

5.72 The changes which occurred around 4000 BC marked a fundamental shift in the way people interacted and co-existed with the environment. The domestication of wild animals and cereals transformed the way people viewed the landscape, and the introduction of monumental forms and pottery placed greater emphasis on a sedentary existence. Although the simplistic view of a 'Neolithic Revolution' has been rejected, the changes which occurred at this time were to foster a way of life completely at odds with the preceding Mesolithic hunter-gatherer societies (Richards 2004). Neolithic activity is better represented within the archaeological record than preceding periods, primarily due to the introduction of monumental constructions. However, the period is still predominantly visible through un-stratified surface scatters of lithic implements.

5.73 The Neolithic begins with the introduction of carinated and then round-based plain pottery vessels, as well as early forms of agriculture and domestication at approximately 4000 years BC. These changes facilitated a sedentary existence and the establishment of permanent settlement sites (although settlement sites remain relatively elusive in archaeological terms until the later Bronze Age). It is now recognised that nomadic forms of existence are likely to have continued throughout the Neolithic with a settled, agricultural existence only adopted gradually and in a piecemeal fashion. The period ends at approximately 2500 BC, with the first metal forms introduced in the latter half of the third millennium BC. Much debate surrounds the transitional periods into and out of the Neolithic, and there is a degree of overlap between the preceding and succeeding periods, emphasising a degree of continuity with the Mesolithic and Bronze Age. The period is often split into the Early and Late Neolithic, with the transition between these phases dated to approximately 3000 BC, and the period is discussed using these terms in this report. A three-part division has also occasionally been employed, utilising a Early, Middle and Late Neolithic framework.

5.74 The Early Neolithic is characterised by distinctive monument 'types', including causewayed enclosures and long barrows, while the Late Neolithic sees the emergence of increasingly complex 'ceremonial landscapes', including henge monuments and standing stone formations. In the terminal Neolithic evidence of a new material culture, characterised by Beaker pottery and gold and bronze metal objects, appears alongside early barrow monument forms (this period is also known as the Chalcolithic). This period is often labelled the 'Beaker period', and dates from approximately 2600 BC to 1800 BC, spanning the transition between the Neolithic and Bronze Age. For the purposes of this report the Neolithic and Bronze Age are dealt with separately, despite a degree of overlap in monument forms, primarily because the Wiltshire HER information is defined in such terms.

5.75 Neolithic communities had an irreversible impact on the wooded landscape, clearing immense areas for cultivation (Malone 2001, 28). The environmental impact was fairly dramatic, with large areas of the Early Neolithic wooded landscape transformed into a predominantly open, agricultural landscape by the Late Neolithic, as suggested in the Avebury region (Smith 1984). Through agricultural expansion, between 3800-3200 BC, tree cover was progressively removed, and land turned over to farming, as exemplified by the ard marks recorded below the barrow at South Street (Ashbee *et al.*1979). However, truly intensive clearance of post-glacial woodland only occurred from the Beaker period onwards.

5.76 The landscape of Wiltshire was one of the most actively utilised in the Neolithic of the British Isles, leading to an almost unparalleled concentration of monuments. The ceremonial landscapes of the county dominate accounts of the Neolithic, largely because Wiltshire's alkaline limestone soils help preserve rich faunal and human bone assemblages (Pollard 2007, 68). Areas such as Avebury and Stonehenge are world renowned for their Neolithic ceremonial landscapes, and partially extend into the Kennet AS-A and Salisbury AS-A respectively.

5.77 As with preceding periods the Neolithic evidence base still predominantly comprises un-stratified lithic scatters, often identified following ploughing. However, these assemblages represent the dominant, rather than sole, form of evidence and the Neolithic is distinguished from earlier periods by the construction of monuments, which leave a highly visible trace upon the landscape. As opposed to the relatively limited evidence from flint scatters and ephemeral buried soils which characterises the Mesolithic, the Neolithic is represented by large monumental forms including causewayed enclosures and long barrows, in the earliest instance, which eventually developed into large-scale ceremonial landscapes. Neolithic sites are recorded on Figs. 12 and 13.

***Monument density***

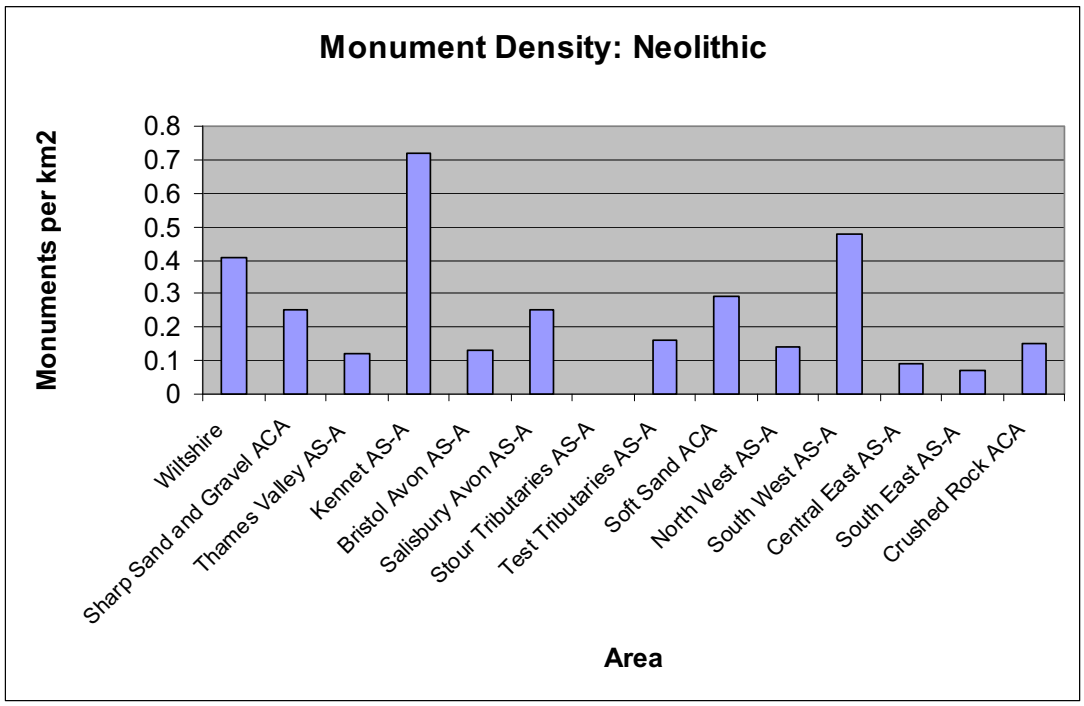
5.78 Wiltshire as a whole has a Neolithic monument density of 0.41 per km². The monument density for the Crushed Rock ACA is significantly lower, at 0.15 per km², as is the density for the Sharp Sand and Gravel ACA, at 0.25 per km². The density for the Soft Sand ACA is slightly closer to the average, at 0.29 per km². These figures are possibly lower due to the focus of Neolithic activity on the chalks of Salisbury Plain (a result of widespread woodland clearance during the period), rather than the river valleys that characterise the Sharp Sand and Gravel ACA. However, our inability to identify highly degraded monumental forms located on the river gravels (aside through archaeological excavation) is also likely to have impacted upon these monumental densities, as exemplified by the long barrow only recorded through excavation at Cleveland Farm in the Thames Valley.

5.79 Only the Kennet AS-A and the South-West AS-A have higher densities than the average. The Kennet AS-A has the greatest density, at 0.72 per km$^2$, probably due to the 'ceremonial' landscape focused around Avebury. The South-West AS-A also has a high density, of 0.48 per km$^2$, but it is clear that this density primarily results from un-stratified lithic assemblages, not monumental sites (see Fig. 13). The densities for the study area, although lower than the average, are the closest to the average of any of the ACA figures for later prehistoric periods.

Table 5.7 Monument Density: Neolithic

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 1428 | 0.41 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 98 | 0.25 |
| Thames Valley AS-A (78 km$^2$) | 10 | 0.12 |
| Kennet AS-A (43 km$^2$) | 31 | 0.72 |
| Bristol Avon AS-A (83 km$^2$) | 11 | 0.13 |
| Salisbury Avon AS-A (178 km$^2$) | 45 | 0.25 |
| Stour Tributaries AS-A (10 km$^2$) | 0 | 0 |
| Test Tributaries AS-A (6 km$^2$) | 1 | 0.16 |
| Soft Sand ACA (342 km$^2$) | 99 | 0.29 |
| North West AS-A (95 km$^2$) | 14 | 0.14 |
| South West AS-A (160 km$^2$) | 78 | 0.48 |
| Central East AS-A (21 km$^2$) | 2 | 0.09 |
| South East AS-A (66 km$^2$) | 5 | 0.07 |
| Crushed Rock ACA (88 km$^2$) | 13 | 0.15 |

Graph 5.4 Monument Density: Neolithic




### *Monumental sites*

### *Causewayed enclosures*

5.80 Causewayed enclosures form the earliest evidence of intentional enclosure and are often dated to the Early Neolithic (recent dating revisions suggest causewayed enclosures largely date to 3650-3300 BC). The exact purpose of such monuments is unclear (Darvill 2010, 97), yet they seemed to have functioned as demarcated

meeting places, possible centres of production, occupation sites, and focuses of ritual activity for relatively mobile populations (Oswald *et al* 2001, 123-132). The high concentrations of cattle bones from Windmill Hill would suggest a ritualistic or feasting role for causewayed enclosures (Whittle 1999 *et al*). However, they do not seem to have functioned solely as 'domestic' centres, and the prevalence of human bone would suggest a ritual role (Cunliffe 1993, 52). Such enclosures seemed to be concerned with maintaining (often concentric) porous boundaries, with highly segmented ditched boundaries or palisades.

5.81 Wiltshire as a whole is prolific in the distribution of causewayed enclosures, with one of the largest sites recorded at Crofton, Wiltshire, with a diameter of over 600m, straddling the River Dunn (Lobb 1995). Windmill Hill (just outside the Kennet AS-A north-west of Avebury) was one of the first causewayed enclosures to be excavated (Smith 1965) and dates to the early fourth millennium BC. Despite the proliferation of causewayed enclosures in Wiltshire, none are confirmed within the study area.

5.82 Aerial photography has been crucial in the identification of causewayed enclosure sites, and cropmarks have revealed a possible causewayed enclosure located within a field in a bend of the Broadmead Brook at West Kington (AMIE 971268) in the Crushed Rock ACA. A geophysical survey at Down Ampney, in the Thames AS-A, has revealed a large, possibly Neolithic, enclosure (AMIE 1514993) which is perhaps a causewayed enclosure, although further archaeological investigation is required into this possible feature.

***Long barrows and mortuary enclosures***

5.83 Long barrows are perhaps the most distinctive Early Neolithic monument types, forming large mounds of earth and stone, with the earliest examples dating to between 3900-3500 BC (Malone 2001, 112). Within Wiltshire there are two dominant long barrow forms, with chambered megalithic tombs of the Cotswold-Severn tradition in the north of the county, and earthen long barrows dominating elsewhere. That these monuments were constructed and positioned singularly and often in isolated locations (Darvill 2004, 85) suggests a degree of reverence towards their use and meaning. Long barrows would probably have been seen as liminal locations, and the distribution and positioning of human remains within the chambers of megalithic long barrows appears to be highly complex, and probably held significant meaning to the living (Shanks and Tilley 1982, 108; Thomas 1988).

5.84 The role of ancestors was central to Neolithic life, and long barrow monuments represent a major shift in the perception of the dead on behalf of the living. Megalithic long barrows appear to have been used as 'houses' for the dead, often containing the remains of multiple individuals within their chambers, which remained accessible after the building of the cairn (Thomas 1999, 143). A variation on the tradition is the use of earthen long barrows. The final form of the earthwork, a long tapering mound of earth, seems to have represented the final stages of closure, preceded by use as a stage for mortuary practices, often involving temporary timber structures, chambers and pits (Kinnes 1992). In Wiltshire these two traditions meet (Pollard and Reynolds 2002), and the resulting monument forms show this mixture of influences (Malone 2001, 127).

5.85 The Cotswold-Severn megalithic tradition, characterised by trapezoidal cairns with stone-built chambers, is perhaps the most distinctive regional style of Neolithic mound, and extends into the north-western parts of Wiltshire. The influence of the Severn-Cotswold long barrow tradition is most seen within the Crushed Rock ACA, which otherwise has a low density of Neolithic monuments. There are three

recorded long barrows within the ACA at Fox Covert (ST77NE100), Giants Cave (ST88SW100) and south-east of Giants Cave (ST88SW101). Fewer megalithic long barrows are recorded elsewhere within the study area, located further from the distribution of the Cotswold-Severn tradition.

5.86 Earthen long barrows represent an environmentally-determined variant of the Cotswold-Severn tradition, in regions where stone was not readily available. The tomb close to Sherrington (WHER ST93NE102) within the Salisbury AS-A, excavated in the early 19th century, produced charred wood and ashes, as well as a stone cist, suggesting ritual use prior to construction of the earthen mound. A large number of earthen long mounds have been excavated in Wiltshire, and despite their frequent association with funerary activities, it is perhaps significant to note that not all long mounds produce mortuary deposits. Evidence of cultivation preceding a number of long barrows suggests the locations where they were built had previously been in agricultural use (Darvill 2004, 92), and the tombs would probably have acted as focal points in the Early Neolithic landscape centred on causewayed enclosures (Malone 2001, 108). It has even been suggested that the distribution of long barrows suggests 'tomb territories' surrounded causewayed enclosures (Barker and Webley 1978), and may have served as territorial markers and monuments of ostentatious display (Renfrew 1973).

5.87 The long barrow at Beckhampton Road (WHER SU06NE108) produced Neolithic pottery and animal bones including ox skulls, but no evidence of human internment. The Beckhampton Road long barrow formed part of a particular focus of long barrows in the Kennet AS-A, including Temple Bottom long barrow (WHER SU17SW101), and the possible barrow represented by the Devils Den (WHER SU16NE101). Temple Bottom produced skeletal remains associated with a stone muller, pottery fragments, bone implements and burnt human bone. A further possible long barrow is recorded at Lockeridge (SU16NW656) although it has not been confirmed by excavation. It has been suggested that the long barrows recorded in the Avebury Valley were not primarily concerned with inter-visibility (Wheatley 1995), unlike those recorded across Salisbury plain which often possessed strong inter-visibility with their neighbours. It must also be noted that a number of long barrows may now only be represented by ditches only, such as the example identified at Cleveland Farm in the Thames Valley.

5.88 It is suggested that prior to the construction of earthen long barrows, the sites were used as mortuary enclosures, associated with the excarnation of the dead (Cunliffe 1993, 63). These enclosures sometimes survive, as slight rectangular enclosures. A possible Neolithic mortuary enclosure (AMIE 1516704) has been suggested from cropmarks in the upper reaches of the Salisbury Avon AS-A. A further Neolithic rectilinear enclosure has been excavated at Eysey Manor Farm (AMIE 1337476) in the Thames Valley AS-A (CA 1999) and may have served a similar ritualistic purpose. Long barrow construction seem to be closely allied, at least in constructional terms, with mortuary enclosures and cursus monuments (Pollard 2007, 86; Malone 2001, 113). Mortuary enclosures, bank barrows, long barrows and cursus are similar monumental forms and are likely to have shared similar functions within the early monumental landscape.

***Cursus monuments***

5.89 Towards the end of the Early Neolithic the concept of the long mound changed, and the monumental bank and ditch was utilised in increasingly varied circumstances. Bank barrows and cursus monuments emerged, which often seem to be associated with causewayed enclosures and long barrows (Cunliffe 1993, 72). Where cursus

monuments have been dated they belong to the late fourth millennium BC (Whittle 1999), but they remain one of the more enigmatic monuments of the Neolithic. That they date to the Neolithic has been proven by examples such as the Lesser Cursus, near Stonehenge (Richards 1990). No cursus monuments have been recorded within the study area, although a possible cursus has been identified by a desk-based assessment between Amesbury and Berwick Down (AMIE 12311837).

***The Late Neolithic ceremonial landscape***

5.90 The Late Neolithic landscape is often described as 'ceremonial', forming monumental complexes of great longevity (Pollard 2007, 87). By 3000 BC the causewayed enclosures and long barrows of the Early Neolithic has been all but abandoned (Malone 2001, 165). In their place large, resource-consuming, monuments had emerged, including henges, stone and timber circles, stone rows and pit clusters. The landscape was becoming increasingly man-made, and ceremonial avenues were being constructed to orientate people through the monument complexes and enhance the visual impact of ceremonial centres. The ceremonial landscapes were inherently linked to the display of power and wealth, and probably indicate the emergence of an increasingly stratified society (Darvill 2010, 163).

5.91 The study area contains elements of two of the most important ceremonial landscapes in the country, namely, the Avebury complex and the Stonehenge complex. It was in the third millennium BC that the landscapes surrounding Stonehenge (Darvill 2004, 46) and Avebury (Cunliffe 1993, 109) witnessed the most intense phase of their development, straddling the Late Neolithic and Early Bronze Age. In many instances there is a clear succession from Early Neolithic monument forms to Late Neolithic monumental complexes, as can be seen at the Avebury complex (Malone 2001, 169), which consists of Silbury Hill (WHER SU16NW102), Windmill Hill, and Avebury henge and stone circles, as well as numerous Early Neolithic long barrows, such as the example recorded at West Kennet (WHER SU16NW656; SU16NE101; SU17SW101; SU06NE108) and Windmill Hill causewayed enclosure. Long-term activity in the vicinity is suggested by woodland clearance recorded in the Avebury region from soil below barrows (Cunliffe 1993, 39).

5.92 The Stonehenge complex focuses on the henges of Durrington Walls and Stonehenge, potentially linked by the River Avon and the Avenue. The landscape in this region of the Salisbury Avon AS-A has been termed the 'Durrington Zone', and formed part of the Stonehenge landscape that was increasingly given over to ceremonial activity during the third millennium BC (Richards 1990, 270; Darvill 2005, 58). A series of timber circles (Durrington 67-70) linked Woodhenge and the henge at Durrington Walls, forming part of the wider processional landscape (Thomas 1995, 125) towards the River Avon.

5.93 These monuments formed components of a complex ritual landscape, which possibly revolved around highly regulated concepts including 'domains' for the living and the dead (Parker Pearson and Ramilisonina 1998). Durrington Walls and Stonehenge were elements of the same religious complex, with Durrington Walls and Woodhenge possibly used for feasting prior to procession down the River Avon and along the Avenue to Stonehenge (Parker-Pearson 2005, 64). A similar riverine arrangement is recorded at Avebury, with the progression from wooded palisade enclosures at West Kennet (WHER SU16NW134), upstream of the timber and stone circles at the Sanctuary (outside study area), which itself was linked to the stones at

Avebury (WHER SU16NW104) by the West Kennet Avenue (WHER SU16NW106; Parker-Pearson 2005. 66).

5.94 The diversity of construction material used to construct these new monuments is increasingly realised, and was possibly attached to significant social and ritual meanings (Jones 1999). As the Neolithic progressed there is a distinct 'lithizication' at many existing sites, with the replacement of timber and earth with stone. It has been suggested that there is a juxtaposition of stone and wood at the neighbouring sites of Stonehenge and Durrington walls (Parker-Pearson and Ramilisonina 1998) in the Salisbury AS-A, perhaps representing the distinct 'domains' of the living and the dead. There also appears to have been a huge diversity in use and meaning of monumental complexes, and similar monumental forms appear to have served very different purposes. For example, the Avebury henge is relatively 'clean' in terms of domestic material, while Durrington Walls henge contains vast deposits of midden material (Pollard 2007, 87), indicating very different kinds of monument.

5.95 Late Neolithic monumental landscapes equate to a far greater control of people and resources, and have been taken to indicate the rise of chiefdoms (Renfrew 1973), although this interpretation has been questioned. By the end of the third millennium BC large-scale, communal, monumental enterprises had largely ceased, and the individual was beginning to play an ever-more prominent role in society, as represented by Beaker period finds and the barrow burial tradition. A forerunner of this tradition is perhaps represented by the single crouched inhumation found close to Dinton Village (WHER SU03SW101; AMIE 643806), recorded in South West ACA, complete with associated flint flakes and worked bone.

***Henge monuments***

5.96 The Later Neolithic witnessed an intensification of monument construction, including the iconic 'henge' monuments, dating from the later 4th millennium BC (Harding 2003, 14), which developed into a broad tradition of circular stone, timber and earthwork enclosures constructed in the third millennium BC (Clare 1986). These enclosures, between 20-200m in diameter, are formed by a bank and internal ditch, usually with two opposing entrance ways, representing a significantly greater investment in time and labour than early Neolithic causewayed enclosures. Despite this greater input, the use these monuments were put to remains unclear. Henge monuments were being placed into already 'busy' landscapes, and were often positioned in rather inconspicuous locations. It seems that many henges were associated with waterways (Richards 1996), rather than being concerned with prominent landscape settings. In this respect henges represent a marked transition from causewayed enclosures, and several henges are recorded within the study area. It needs to be borne in mind, however, that henges, formative henges and larger henge enclosures all represent very different monuments.

5.97 Several henge monuments have been recorded within the ACAs, including close to Southleigh Wood (ST84SE105; AMIE 207567) in the South West ACA, in an area of otherwise limited Neolithic activity. A further probable henge monument has been recorded from aerial photography close to Wilsford House (SU05NE102) in the Salisbury Avon AS-A. A number of pits visible outside the henge emphasises the fact that such monuments should not be seen in isolation, but rather formed one element of a wider ceremonial landscape.

5.98 A possible henge monument was revealed during an excavation ahead of gravel extraction at Cotswold Community (WHER SU09NW100) in the Thames Valley AS-A. Flint and pottery of the Neolithic to Early Bronze Age suggested a broad

chronological use, and a double post-hole alignment and the presence of a cattle skull and miniature vessel within the ditch fill perhaps suggests a ritual purpose (Powell 2009, 104).

5.99 Wiltshire has a particular concentration of henges, with a few extremely large henge enclosures recorded within the study area. These henges have a diameter of over 300m (Wainwright 1989) and represent an enormous investment of resources and labour, dominating the landscape as focal points. These sites seem to be involved in ritual activities, and show complex patterning of deposited materials. Perhaps significantly, burial in the Late Neolithic shifted away from large monumental, communal burials, instead commonly focusing on ditches and pits within and around henge monuments (Malone 2001, 122).

5.100 Avebury henge (SU16NW104; Gillings and Pollard 2004), in the Kennet AS-A, represents a classic henge site, and consists of a huge banked enclosure surrounding a stone circle, originally consisting of around 100 stones. Within the banks two smaller stone circles are also recorded, associated with Grooved Ware, and likely to be of a Late Neolithic date (Pollard and Reynolds 2002). The interior of these henges seem to be complex ritual environments, and timber circular arrangements and structures have been recorded at several examples. These circles often show a progression from timber to stone, and increasingly complex and diverse constructions and depositional activities.

5.101 Within the henge enclosure at Durrington Walls (SU14SE100), in the Salisbury AS-A, a number of timber structures have been recorded within its earth banks (Wainwright and Longworth 1971). Activity at Durrington Walls is dated to the very Late Neolithic, and the main earthworks were erected c. 2600 BC (Darvill 2005, 49). Several timber structures have been recorded within the site, including the concentric timber rings of the South Circle, and these are associated with a timber avenue, dated to 2560-2520 BC. Durrington Walls has been interpreted as part of the 'domain of the living', forming part of a wider monumental landscape in conjunction with Stonehenge and other nearby monuments (Parker-Pearson and Ramilisonina 1998).

5.102 Henge monuments seem to focus attention on territories defined in the Early Neolithic, with the henges at Avebury and Durrington closely associated with monuments of this time (Cunliffe 1993, 118). However, the Late Neolithic intensification of landscape meaning is not witnessed universally. For instance, the Late Neolithic complex at Marden earthworks (WHER SU05NE100; AMIE 215179), in the Salisbury Avon AS-A, is not directly related to preceding or succeeding monuments (Cunliffe 1993, 118). The Marden group, including the Marden henge enclosure, a massive mound (Hatfield barrow), and a circular timber building, forms the third significant monumental complex to partially fall within the study area (Wainwright 1971). Basal deposits from the henge ditch have been dated to 2500-1800 BC, while pre-enclosure occupation has been dated to c. 3300 BC (Cunliffe 1993, 104). A further possible henge (AMIE 1002029) has been suggested from cropmarks south-east of Marden, suggesting a particularly dense area of Late Neolithic activity.

***Monumental Mounds and Barrow groups***

5.103 Very large barrows are recorded in close association to ceremonial landscapes and centres at several sites within the study area. Perhaps the most iconic mound recorded from within the study area is Silbury Hill (WHER SU06NE119) situated in the Kennet AS-A, close to Avebury. This man-made mound was constructed in a

least four stages, with the primary cone dating to c. 2700 BC (Cunliffe 1993, 109), around a turf stack with a stake circle. The mound, measuring 37m in height, was constructed from layers of clay, flint, gravel, turf and soil ((AMIE 644786; Malone 2001, 174). This monument was distinct from smaller surrounding barrows, primarily due to its sheer scale and apparent lack of any mortuary remains. A further monumental mound, the Hatfield barrow, is recorded as part of the Marden earthwork groups (WHER SU05NE100; AMIE 215179), in the upper reaches of the Salisbury Avon AS-A.

5.104 Smaller barrows are broadly associated with the Early Bronze Age, but it is increasingly realised that many barrows (often only surviving as ring ditches) have their earliest contexts securely dated to the Late Neolithic, being associated with Grooved Ware pottery. Barrow groups with confirmed Neolithic activity include the Woodhenge Barrow group (AMIE 219047), outside Durrington Walls, in the Salisbury Avon AS-A which included several barrows associated with Grooved Ware pottery within primary silt deposits. The earliest burials in round barrows occur in the Late Neolithic, associated with the introduction of Beaker pottery, but the tradition reaches it peak in the Early Bronze Age. Precise dating evidence is rare and undated barrows have been discussed in the Bronze Age section.

***Circles and Standing stones***

5.105 Ceremonial circles, often of stone or timber, are a further Late Neolithic introduction which continue into the Early Bronze Age. Standing stones are often recorded as parts of wider stone circles, often assumed to be Neolithic in date. Henge and stone circle monument distributions converge in the Wiltshire area, and the monument forms are combined at several prominent examples, including Avebury and Stonehenge. Woodhenge is located to the south of Durrington Walls within the Salisbury AS-A, and consists of six concentric post settings, with a child burial located at the centre, dated to 2410-2370 BC (Malone 2001, 180). Avebury henge includes an extensive stone circle within its earthworks, and burials are associated with the individual stones of the circle (AMIE 644821), highlighting the variety of mortuary rituals in the Late Neolithic.

5.106 Circles are also recorded outside of henge monuments. A timber circle was recorded just outside the southern entrance of Durrington Walls, with several phases of activity dated to 2850-2200 BC. This too consisted of six concentric rings of posts with a central hearth and evidence of feasting (Malone 2001, 180). At Marden a 21 post circular structure is recorded outside the northern entrance, in addition to the timber circle recorded within the henge earthworks.

5.107 In the Kennet AS-A, a single stone remains of Falkners Circle (SU16NW105; AMIE 220780), preserved within the course of a hedgerow. At Fir Clump (SU18SE117), in the South West ACA, a concentric stone circle was destroyed during the construction of the M4. The site of a probable stone circle is recorded at Clatford (AMIE 220502) within the Kennet AS-A, which appears to have been destroyed in the 19th century. Standing stones have been documented in Bowood Park (AMIE 212402) in the North West AS-A and have previously been suggested as the *in situ* remains of a circle, in an area of otherwise relatively sparsely recorded Neolithic activity. It must also be noted that circles occur in timber form, and have been recorded on the gravels, including a possible example from Cotswold Community. However, these sites are poorly recognised, and require further archaeological investigation.

### *Avenues*

5.108 Avenues, defined by earthworks, and occasionally stone, formed routes of movement through the 'ceremonial' landscapes. The West Kennet Avenue (SU16NW106), identified by ground penetrating radar (AMIE 1184711), originally extended from Avebury to the The Sanctuary on Overton Hill, and 27 sarsen stones preserve its course (Pollard 1992; Malone 2001, 187). The function of avenues was possibly similar to Early Neolithic cursus, although cursus seem to be primarily used for funerary ritual, while avenues are primarily processual monuments (Malone 2001, 187). Within Durrington Walls a late Neolithic metalled road (SU14SE133) has been recorded which was perhaps associated with processual ceremony within the henge.

5.109 The Avenue (AMIE 858883) earthwork, regarded as a processional approach to Stonehenge from the River Avon, partially extends into the Salisbury Avon AS-A. It was the first Late Neolithic monument of its kind to be identified , and has been interpreted as part of the ceremonial routeway linking the henges at Durrington Walls and Stonehenge. A long ditch was recorded at the Stonehenge Visitor Centre (SU14SE135) in the Salisbury Avon AS-A which may also have served as a processional monument.

### *Late Neolithic enclosures*

5.110 Palisade enclosures were a Late Neolithic introduction dating to the third millennium BC. Between Avebury henge and Silbury Hill two enclosures have been recorded, both associated with Grooved Ware pottery (Cunliffe 1993, 108; Darvill 2010, 160; AMIE 220886), suggesting a Late Neolithic date for this enclosure, confirmed by radiocarbon dating. A palisade enclosure has been recorded south of West Kennet (WHER SU16NW129; AMIE 904341; AMIE 1261692), where excavations recorded two palisades set in backfilled ditches. Further excavations in the West kennet area (WHER SU16NW791; AMIE 1049539) recorded ditches and two postholes which were possibly associated with the above enclosure. Nearby to this enclosure a second oval-shaped palisade enclosure (SU16NW134) was recorded which contained three double-concentric timber structures.

5.111 These enclosures, with their concentric rings of timber uprights, seem to be a Late Neolithic/Early Bronze Age addition to the ceremonial landscape in the Upper Kennet Valley. At the West Kennet enclosures pig bones were the dominant faunal remains, which perhaps suggest a feasting role for the site (Whittle 1997). That these remains were closely associated with the timber uprights of the palisade, and showed prevalence for particular parts of the animal, suggests a ritual meaning to their deposition.

### *'Domestic' sites*

*Pit groups*

5.112 Single Neolithic pits and pit groups provide a rather common, although enigmatic, monument 'type', being located in a wide range of contexts and settings. Neolithic pit groups, frequently filled with occupation material, are often taken as evidence of settlement, although significant non-domestic activity has also been suggested (Thomas 1999, 70), especially for pit clusters recorded within ceremonial landscapes. Furthermore, supposedly structural pit groups are often difficult to distinguish from pit clusters (Darvill 2010, 84).

5.113 Pit groups are interpreted as evidence of settlement, primarily because of their frequent 'domestic' fill, such as the four pits containing early Neolithic pottery, and

the single pit containing Late Neolithic Grooved Ware, at Nertherhampton Road (SU12NW100) in the Salisbury AS-A. Two pits were recorded at Tilshead Nursery School (SU04NW109) within the Salisbury AS-A, which contained deposits of bone, antler, hazelnut, shell and flints, perhaps suggesting a fill largely derived from domestic activity. A single shallow pit was recorded during road construction at Court Farm (WHER SU09NE100) in the Thames Valley AS-A. Its fill consisted of ash, containing worked flints and burnt fragments of antler. A further single pit was identified close to Matrimony Farm (SU12SE104) in the Salisbury AS-A which contained flint-tempered pottery and flint implements. Possible pits or pit groups have been recorded at Netheravon (AMIE 966355) in the Salisbury Avon AS-A containing flints and bone.

5.114 At Cotswold Community (WHER SU09NW100), in the Thames AS-A, Middle and Late Neolithic pits were recorded, characterised by Peterborough and Grooved Ware respectively (Smith 2010, 3). These pits have been suggested as evidence of relatively mobile pastoral activity, representing temporary activity, rather than permanent settlement. Further excavations in the Thames AS-A at Latton Quarry also revealed a Neolithic pit cluster (AMIE 1509537).

5.115 A group of 19 pits recorded to the south-east of Durrington Walls (WHER SU14SE110) in the Salisbury AS-A contained flints and Grooved ware and were perhaps part of a larger structure associated with domestic activities (Wainwright and Longworth 1971). Four pits recorded at the site of the Stonehenge Visitor Centre (WHER SU14SE134) in the Salisbury Avon AS-A suggests further monumental activity in the region of the later henge monument.

5.116 Several Neolithic pits within Wiltshire were created on a massive scale, as at Roughridge Hill, near Avebury (Webster 2007, 72), which could represent the complete burial of whole middens. Many of these midden sites show the deliberate accumulation of 'domestic' waste material (Needham and Spence 1997), although not necessarily representing permanent settlement sites. Later Neolithic pits often contain 'structured' deposits, frequently in association with Grooved ware and 'exotic', sometimes imported, objects. A ceremonial function for these pits is perhaps more likely, and the extent to which these pits accurately reflect settlement sites is open to debate.

***Settlement sites***

5.117 Despite the adoption of farming and the production of ceramics which probably led to an increasingly sedentary existence, Neolithic settlement sites are particularly rare, and are often interpreted from the slight evidence of pits and artefact scatters (Cunliffe 1993, 48). Neolithic settlements would have been light-weight, temporary, dwellings, as at King Barrow Ridge (Richards 1990, 116), and the evidence likely to survive often only consists of stakehole clusters (Darvill *et al.*1996). Where evidence is recorded for Early Neolithic settlements, they therefore appear to be insubstantial and probably associated with relatively mobile population groups (Pollard 2007, 70).

5.118 It has been argued that a process of 'agricultural colonisation', including settlement, occurred in particularly favourable locations, such as the Kennet Valley (Whittle 1990, 101), although the evidence of permanent, substantial settlement remains slight. A probable settlement site was indicated by excavations to the south-east of West Kennet Farm (SU16NW128) where finds included Neolithic pottery sherds, animal bone and flint tools. In the Salisbury Avon AS-A possible Neolithic settlement evidence has been recorded at Snail Down (AMIE 645138) and Windwhistle Lane, West Grimstead (AMIE 1258111). Aside from pit groups, possible settlement sites

have been recorded at Showell Nurseries (ST97SW103; AMIE 1049794; CA 1999b) in the Bristol Avon AS-A, although the excavated features suggest a rather transient Neolithic settlement (OA 1991).

5.119 Evidence of settlement is often only preserved through the survival of the most durable materials, such as flint. The regions around Stonehenge (Richards 1990) and Avebury show particular densities of residual flint (Pollard 2007, 70) which perhaps indicates settlement activity. Further dense concentrations of flint artefacts include the assemblage recorded close to Countess Farm (SU14SE121) in the Salisbury Avon AS-A where flint scatters were located on a low natural rise close to the River Avon. Further dense scatters of worked flints (SU16NW131) are recorded to the north of Silbury Hill in the Kennet AS-A, placing the 'ceremonial' monuments of the Upper Kennet Valley within an increasingly 'domestic' landscape (Holgate 1987, 259).

5.120 Many ceremonial sites are now producing evidence of 'domestic' activity, which perhaps substantiates the claim that the distinction between 'ceremonial' and occupation sites in the Neolithic would have been blurred (Bradley 2003). That the evidence for settlement often resembles mortuary enclosures during the Early Neolithic has led to the suggestion that similar structures served as 'houses for the living' and 'houses for the dead' (Hodder 1990), perhaps only the constructional material and content varying. The role of causewayed enclosures in the Early Neolithic has been much debated, but it seems likely that some settlement role would have been performed at these sites (Malone 2001, 45), and assemblages of flint arrowheads at several sites would suggest that they were certainly defended (Saville 2002, 96-98).

5.121 Recent excavations at Durrington Walls have identified evidence of Late Neolithic 'houses' within the ceremonial henge (AMIE 219364; WHER SU14SE100; Darvill 2001, 158). These were square structures with central hearths, and probably formed part of a much more extensive area of settlement within the Avon valley. Reinterpretation of postholes from Woodhenge to the south of Durrington Walls suggests the presence of a further Late Neolithic 'house' (Darvill 2005, 60). Settlement evidence at Durrington Walls has also been identified below the banks of the later henge and dated to c. 3100 BC (Cunliffe 1993, 86), reinforcing the idea that no great distinction existed between 'ritual' and 'domestic' spheres in the Neolithic (Bradley 2003).

5.122 Recent excavations at Marden henge (WHER SU05NE100) also identified occupation deposits at the ceremonial monument. A ring of post-holes and a chalk house floor containing a hearth, which was deliberately keep possibly served a ritualistic purpose was recorded within the earthworks.

5.123 As the transition to the Bronze Age is approached, the evidence of settlement increases, with more substantial Beaker 'settlements' (comprising coherent pit groups and artefact assemblages) recorded across Wessex (Pollard 2007, 73).

***Industrial sites***

5.124 Aside from flint working sites, few Neolithic industrial sites are recorded within the study area, although a possible flint mine (later used as quarry in the modern period) has been proposed close to Downe Holme, Porton (SU13NE103) in the Salisbury AS-A. Such sites have a large potential to enhance our knowledge of the Neolithic period.

### *Material culture*

*Pottery*

5.125 Pottery was perhaps the most significant new form of material culture to be introduced during the Neolithic. The earliest forms are round-based, which are followed by Peterborough wares and Grooved wares. During the terminal Neolithic the introduction of Beaker pottery is associated with a seismic shift in the perception of community and the individual. Despite this obvious prevalence of pottery within Neolithic life, survival of Neolithic ceramic as surface finds is rare (due to its friable nature) and is more commonly found in stratified contexts during excavation, especially the protected contexts of the chambers of Cotswold-Severn tombs and enclosure ditch silts.

*Arrowheads*

5.126 Flint arrowheads are a relatively common find dating to the Neolithic and have been recorded across all the ACAs. Forms vary from simple transverse and leaf-shaped forms to more complex barbed and tanged examples. Arrowheads are found both as part of larger assemblages, such as close to Ferne House (WHER ST92SW101; ST92SW124), and occasionally as single surface finds, such as at Westbrook (WHER ST97NE103). The appearance of leaf-shaped arrowheads during the earlier Neolithic has been explained in terms of changes in hunting strategies related to woodland clearance.

*Axes*

5.127 Stone axes appear to be the most distinctive material culture forms of the Neolithic, and hint at broad social interactions involved in the exchange of non-native raw material sources (Parker-Pearson 2005, 27-31). The polished axes introduced in the Neolithic represent a significant investment of time and labour, and were perhaps prominent indicators of status. Many of these axes seem to have been imported from outside of Wessex, such as the stone axe found at Ferne House (WHER ST92SW110), the basalt polished axe from New Covert (WHER SU07SW106), a dolerite axe hammer from Castle Ditches (WHER ST92NE101), and the greenstone axes from The Ham (WHER ST85SE101) and Snail Down (WHER SU25SW102). A particular concentration of at least six polished axes is recorded in the vicinity of Freeth Farm (WHER SU07SW104), and a further assemblage of polished axes has been recorded from Donhead St Mary (WHER ST92SW100). That these implements were not purely utilitarian is suggested by the discovery of a miniature greenstone axe close to Enford Bridge (WHER SU15SW101) in the Salisbury AS-A.

*Tool assemblages and flint waste*

5.128 Surface scatters of lithics are the most common form of evidence dating to the Neolithic, and their distribution is indicative of widespread Neolithic exploitation. These assemblages seem to be concentrated at 'pinch points' between the chalklands and the adjacent lowlands (Pollard 2007, 71), perhaps reflecting popular routes of movement. The lithic scatters recorded within the study area seem to concentrate in similar areas as recorded in the preceding Mesolithic period. The South West AS-A again appears to be a focus, with the Upper Greenstones showing particularly dense concentrations of Neolithic flint and chert assemblages.

5.129 The most substantial early 4th-millennium BC scatters are recorded from causewayed enclosures, most notably Robin Hood's Ball (Richards 1990) and Windmill Hill (Whittle *et al.* 2000). Perhaps more significantly, areas in the immediate vicinity of Stonehenge on Salisbury plain, and to a lesser extent Avebury, are

conspicuously free of lithic deposits, suggesting an intentional prevention of 'domestic' activities within certain parts of the 'ceremonial' landscape.

5.130 These lithic scatters are notoriously difficult to date, especially the un-stratified examples, and often seem to span multiple periods. Many Neolithic assemblages also share characteristics with Mesolithic and Bronze Age lithics. At Whitesand Cross (WHER ST92SW122) a Mesolithic flake was utilised to produce a Neolithic fabricator, and at Eyewell Farm (WHER ST93SE114) the flint assemblage included Mesolithic and Neolithic lithics, while flints of Mesolithic to Bronze Age date are recorded from Drove Farm (AMIE 220213). The majority of flint assemblages are relatively un-diagnostic, and can only broadly be assigned a Neolithic date, such as those identified at Tannery House (WHER SU12SE550).

***Conclusions***

5.131 There are three main categories of Neolithic evidence comprising monumental sites, settlement sites and remains of material culture. Monuments, such as Avebury and Durrington Walls, are amongst the most visible features of the period and indeed the present landscape. Settlement sites are less well-represented and what evidence there this has primarily been identified by excavation. The third category comprises evidence for material culture, which predominantly conmprises scatters of worked flint. It is the study of Neolithic settlement sites and find scatters that aggregate extraction can potentially make the greatest contribution.

5.132 Particular concentrations of monumental sites are recorded in the Kennet AS-A and Salisbury Avon AS-A, in the form of the Avebury, Stonehenge, and Marden monumental landscapes respectively. Away from these foci, Neolithic monumental sites are comparatively rare. Settlement evidence is rare, but there appears to be a broad association with known monumental sites and in recent years evidence for 'domestic' activity has been recorded from monuments such as Durrington Walls and Marden.

5.133 The widespread distribution of lithic material across the study area is suggestive of broad Neolithic activity, and is not particularly linked to large monumental sites. Lithics are recorded in particular concentrations within the South-West AS-A, in a region almost devoid of monumental forms or settlement evidence.

**The Bronze Age (c. 2,500 BC to 800 BC)**

***Introduction and chronology***

5.134 Whist the preceding Neolithic can be seen as a time of communal ritual and small-scale forms of agriculture, the Bronze Age saw the widespread adoption of the individual burial rite, and intensive forms of agriculture. However, there was continuity between the Late Neolithic and Early Bronze Age, with many ceremonial sites continuing in use throughout both periods (Darvill 2005). The transition between the two periods occurs between 2500-2000BC, and it is not until c.1500BC that significant changes, namely the widespread intensification of agriculture, distinguish the Bronze Age as truly unique from the preceding Neolithic. It is at this point that the archaeological record shifts from one dominated by monuments, to one dominated by settlements and agricultural features.

5.135 A three-tier chronological system has commonly been used to divide the Bronze Age into the Early (c.2500-1500BC), Middle (c.1500-1000BC) and Late (c.1000-800BC). This chronological framwork is utilised within this summary. The Bronze Age has

also been divided into the Early (c.2500-1500) and Late (c.1500-800), with the division between the two phases occurring around 1500 BC and marked by the widespread appearance of settlement and agricultural intensification (Bradley 2007, 181).

5.136 The Early Bronze Age is characterised by barrow construction and the continued use of ceremonial monuments, and is closely associated with 'Beaker' material culture, the use of which spanned the Late Neolithic to the Early Bronze Age (c.2600-1800BC), and included a period of more intensive monumental activity, which began in the late Neolithic and continued until c. 2200 BC (Pollard 2007, 66). Perhaps the most significant development of the Early Bronze Age was the widespread uptake of the single inhumation burial tradition, commonly under a round barrow and closely associated with Beaker pottery and metalworking (Cunliffe 1993, 113; Darvill 2010, 170). Although the Beaker 'invasion' concept is now largely rejected, it does appear that the 'Beaker' tradition had western European origins as proven by scientific analysis of bone and teeth (Pollard 2007, 74).

5.137 The Early Bronze Age has a complex chronology, but can be summarised as the progression from the first occurrence of metals including gold (2500-2300 BC), to the acme of the Beaker burial tradition (2300-2050BC), to the emergence of diverse pottery forms and the cremation urn burial tradition (2050-1700 BC), and ending with the dominance of the cremation burial rite and the end of the Beaker tradition at c.1500 BC (Pollard 2007, 69).

5.138 However, the focus in the Early Bronze Age firmly remained on the monumental sites developed since the later 4th millennium BC, and in many ways the physical remains of the period represent a continuation of Late Neolithic traditions, including rather ephemeral settlement sites and the 'aggrandizement' of existing monuments. For the purpose of this discussion, monuments which have an antecedence in the Neolithic are discussed in that period summary and any subsequent Early Bronze Age activity is discussed only briefly below.

5.139 The Middle and Late Bronze Age mark a fundamental shift in society during which the importance of the established ceremonial landscapes dwindled and became increasingly 'domesticated' (Fitzpatrick 2007, 107; Champion 1999). By c.2000 BC the economy of the Wiltshire area was increasingly based on animal husbandry and cereal cultivation (Wilkinson and Straker 2007, 103), and this is reflected in the number of field systems and roundhouse settlements recorded, especially in the lowlands. The Middle and Late Bronze Age saw the emergence of large-scale societies and witnessed agricultural and settlement intensification. It was a dramatic social change, from an archaeological record which largely resembled the preceding Neolithic, to a new focus on agriculture and domestic settlement which was to characterise subsequent periods. It was in this period that the landscape was subject to extensive agricultural exploitation.

5.140 The Late Bronze Age (1000-700BC) is primarily defined by the variety and complexity of its metalwork (Needham 1996), especially ornate axe forms, deposited in hoards and occasionally settlement contexts, and only very rarely within burials. The deposition of metalwork within watery contexts seems to have been a common occurrence, and appears to be linked to ritual deposition (Bradley 1990). By the Late Bronze Age prestige objects and control of agricultural production are favoured over monumental construction. The increasing prevalence of ornate metalwork and hoards in the Late Bronze Age suggests the rise of hierarchical, or at least ostentatious and competitive, social groups. Bronze Age sites recorded within the study area are recorded on Figs. 14, 15, and 16.

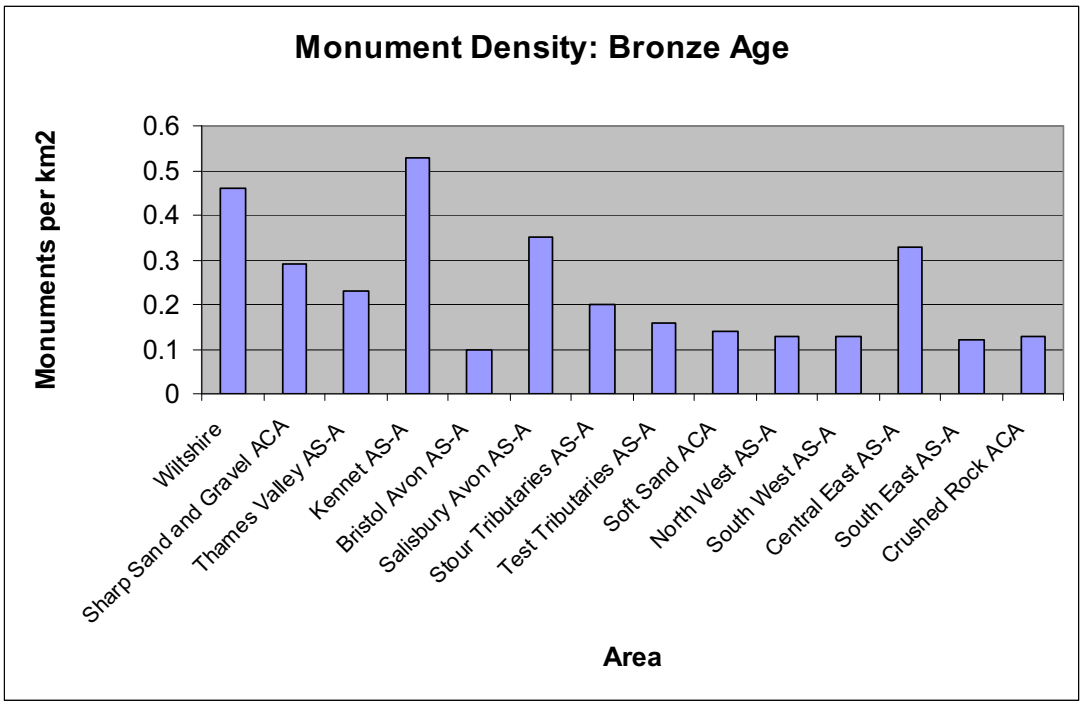
### *Monument density*

5.141 The density of Bronze Age monuments within Wiltshire and Swindon as a whole is the highest of any of the prehistoric periods, at 0.46km². The densities within the ACAs, however, are all significantly lower, at 0.25 per km for the Sharp Sand and Gravel ACA, 0.29 per km for the Soft Sand ACA and 0.15 per km for the Crushed Rock ACA (Table 5.8). This possibly reflects the Early Bronze Age focus on Salisbury Plain and the Marlborough Downs, which largely fall outside the study area. The most important trends relate to the intensification of already occupied landscapes and intensification of occupation onto other areas.

Table 5.8 Monument Density: Bronze Age

| Area | Number of Records | Density ($km^2$) |
|---|---|---|
| Wiltshire (3485 $km^2$) | 1619 | 0.46 |
| Sharp Sand and Gravel ACA (398 $km^2$) | 115 | 0.29 |
| Thames Valley AS-A (78 $km^2$) | 18 | 0.23 |
| Kennet AS-A (43 $km^2$) | 23 | 0.53 |
| Bristol Avon AS-A (83 $km^2$) | 8 | 0.10 |
| Salisbury Avon AS-A (178 $km^2$) | 63 | 0.35 |
| Stour Tributaries AS-A (10 $km^2$) | 2 | 0.2 |
| Test Tributaries AS-A (6 $km^2$) | 1 | 0.16 |
| Soft Sand ACA (342 $km^2$) | 47 | 0.14 |
| North West AS-A (95 $km^2$) | 12 | 0.13 |
| South West AS-A (160 $km^2$) | 20 | 0.13 |
| Central East AS-A (21 $km^2$) | 7 | 0.33 |
| South East AS-A (66 $km^2$) | 8 | 0.12 |
| Crushed Rock ACA (88 $km^2$) | 11 | 0.13 |

Graph 5.5 Monument Density: Bronze Age




5.142 Pre-existing monumental landscapes are the focus of Early Bronze Age activity, and in this respect it is not surprising that the Kennet and Salisbury Avon AS-As have particularly high densities of Bronze Age sites. The Thames Valley AS-A also has a

high density of Bronze Age sites, which is in contrast to its low Neolithic density. This is likely to reflect the Thames Valley AS-A status as new area of activity in the Middle and Late Bronze Age (rather than a continued focus on monumental landscapes) probably due to the fertile soils of the river terraces in the vicinity of the River Thames.

5.143 The Central East AS-A has the third highest density, but this is based upon a low number of sites within an AS-A of small size, and the figure for the Soft Sand ACA as a whole probably reflects a more accurate density for the Central East AS-A.

5.144 The low density AS-As do not necessarily equate to areas of low Bronze Age significance. This is illustrated by the Bristol Avon AS-A, which has the lowest Bronze Age monument density, but also contains at least two significant undated barrow concentrations. These barrows are not recorded as Bronze Age monuments in the Wiltshire HER, and are not included in the Bronze Age monument density calculations. Therefore it must be borne in mind that the densities provided here are not always a true reflection of Bronze Age activity. Therefore Fig. 16 (undated barrows) perhaps provides a more accurate representation of Bronze Age activity when taken in conjunction with Fig 14 and 15.

***Continuity from the Late Neolithic***

5.145 The Early Bronze Age marked a continuation in monumental forms from the Late Neolithic, and many of the sites in use throughout the Neolithic witness further aggrandisement in the Early Bronze Age, such as the 'lithicization' of the henges at Avebury and Stonehenge (Cunliffe 1993, 111), and the construction and alteration of enclosures at Durrington Walls (WHER SU14SE100) and West Kennet (WHER SU16NW134; SU16NW129). Palisade enclosures constructed at Kennet were probably erected in the Early Bronze Age, in addition to the existing Neolithic monuments. The major phase of construction at Stonehenge/Durrington Walls complex, as well as at Silbury Hill (WHER SU16NW102) and Avebury stones (WHER SU16NW105) dates to approximately the mid third millennium BC (Parker-Pearson 2005, 67), spanning the Late Neolithic and Early Bronze Age. Within the study area, the Avenue leading to Stonehenge appears to be a Late Neolithic/Early Bronze Age addition to the ceremonial landscape adjacent to the River Avon, although excavations (AMIE 644407) produced little datable evidence (Smith 1973, 42).

5.146 Henge monuments occurred throughout the third millennium BC, bridging the chronological divide between Neolithic and Bronze Age, and timber and stone circles also saw a period of use throughout the third and early second millennium BC. The stone circle recorded at Falkners Circle (AMIE 1376678), in the Kennet AS-A, appears to have a Bronze Age phase and is an example of this continued focus on existing ceremonial landscapes. Silbury Hill was constructed through multiple phases of activity that occurred throughout the third millennium BC, and Bronze Age activity is recorded by the presence of Beaker sherds from the mound itself (AMIE 1364729).

5.147 Beaker pottery is often recorded from the upper fills of the silted ditches of causewayed enclosures and long barrows, which had been out of use for half a millennia in many cases (Parker-Pearson 2005, 80). Old earthworks and monuments were the focal point for Early Bronze Age activity, and cemeteries of round barrows developed around Neolithic long barrows, stone circles, cursus and long barrows (Parker-Pearson 2005, 81). Excavations at Beckhampton Road (AMIE 1049794) recorded Bronze Age pottery at the Neolithic long barrow, and illustrates

that although the construction of long barrows ceased in the Neolithic, their use continued into the Bronze Age.

5.148 Further excavations at Cotswold Community (WHER SU09NW154) in the Thames AS-A confirm the continuity between the Late Neolithic and Early Bronze Age at possible settlement sites, with 'domestic' activity of both periods characterised by ephemeral features such as pits and post-holes (Powell *et al.*2010, 4). There was also overlapping ceramic evidence, with both Grooved Ware and Beaker pottery recorded, representing the Late Neolithic and Early Bronze Age respectively (Powell *et al* 2010, 30).

***Burial, barrows and ring ditches***

5.149 Barrows are the most prominent monument form in the Bronze Age of southern England, and particular concentrations are recorded within Wiltshire. This proliferation of barrows is intimately linked to shifts in social organisation and the rise of the individual burial rite (Cunliffe 1993, 117). Construction of barrows began in the Late Neolithic, associated with the appearance of the Beaker 'package', but increased rapidly from the Early Bronze Age. Barrows represent the archetypal Bronze Age monument, but in reality they can be complex monuments of earlier or later use. For example, the Gallow's Barrow (AMIE 644265; WHER SU14NE604) in the Salisbury AS-A, dates to c.2400 BC, and represents a transitional form between long barrow and round barrow, while a barrow is recorded overlying the north-east end of a long barrow at Bishops Canning Down (WHER SU06NE733) in the Kennet AS-A. The earthworks at Court Farm (WHER SU09NE600), in the Thames Valley AS-A, are possibly a twin barrow or a long barrow, and a similar uncertainty exists over the earthworks to the south of Falkner's Circle (WHER SU16NW615), in the Kennet AS-A. Two barrows close to Cadley House, in the Kennet AS-A, form a figure-of-eight formation (WHER SU26NW610 and SU26NW611) and perhaps represent a further modification of the barrow burial tradition.

5.150 The distribution of barrows reflects the Early Bronze Age focus on existing ceremonial features, most obviously through the barrows which seem to form a visual 'envelope' around such sites as Avebury (AMIE 1143971) and in the vicinity of Stonehenge (Woodward and Woodward 1996), two of which are recorded in the area of Vespasian's Camp (WHER SU14SW64T and SU14SW896). It is likely that Bronze Age communities viewed Neolithic monuments with reverence as the remains of ancestral or mythical forebears (Gosden and Lock 1998), and through spatial analysis techniques it is now recognised that the placement of barrows was strictly regulated, with regards to earlier monumental complexes, local topography, and the principle of circularity (Woodward and Woodward 1996). Barrows may have served additional or alternative purposes opposed to burial, and many barrows have no sign of mortuary rites, and were possibly constructed for other purposes such as territoriality (Renfrew 1973).

5.151 Barrows, and barrow cemeteries, are distributed widely across the study area, and particular concentrations of barrows are recorded in the upper reaches of the Kennet AS-A, the middle reaches of the Salisbury AS-A north of Salisbury city, and through the Thames AS-A. The first two concentrations reflect the tendency for Bronze Age barrow distributions to favour Neolithic ritual landscapes, while the Thames valley distribution reflects the growing importance of the Thames river terraces to Bronze Age communities in terms of its agricultural productivity. Noticeably lower distributions of barrows are recorded in the Soft Sand and Crushed Rock ACAs. These regions form the uplands of the study area, and the lower distribution of Bronze Age barrows perhaps reflects the movement of Bronze Age communities

away from the uplands into the river valleys and lowlands as the Bronze Age progressed. This trend is established elsewhere in the country and seems to be related to climatic deterioration and over-intensive use of previously cleared upland areas (Caseldine and Maguire 1981). However, the distribution of barrows is predominantly based upon barrows constructed with surrounding ditches, which are relatively easy to detect through survey methods and excavation (as ring ditches). Barrows that were unditched are far more difficult to detect archaeologically, and perhaps might exhibit different distribution patterns.

5.152 The form and content of barrows has been used to provide a chronology of the Bronze Age, from an initial focus on single, often male, inhumation, to an increasing diversity in barrow form, content and burial rite by the start of the second millennium BC, followed by the widespread adoption of relatively modest cremation burials. However, these broad developments only represent a general model, and variation is widespread (Pollard 2007, 91). Barrows usually represent multiple episodes of activity and form, and many saw use over a long time span, incorporating secondary inhumation and cremation burials (Cunliffe 1993, 115).

5.153 The earliest Beaker barrows are relatively small, but often form the focus of linear cemeteries of Bronze Age barrows (Pollard 2007, 88). A group of four very small ring ditches (WHER SU29NW603 - SU29NW606) are recorded south of the River Tham in the Thames Valley AS-A and may represent an Early Bronze Age barrow group. The earliest instances of Beaker burials were characterised by richly adorned crouched inhumations, usually male, within oval pits below earthen round barrows (Cunliffe 1993, 115). Metal first appeared alongside Beaker pottery, and commonly occurred with arrowheads, wristguards and daggers, often seen as constituting a Beaker 'Package' (Parker-Pearson 2005, 74). A ring ditch excavated at Norton Bavant (AMIE 655095) in the Salisbury Avon AS-A contained an Early Bronze Age high-status male inhumation, associated with grave goods including a bronze dagger and knife, and worked bone (Butterworth 1992, 8). A secondary inhumation was recorded in the ditch of the barrow. The Amesbury archer (c.2400-2200 BC), just outside the Salisbury Avon AS-A, is perhaps the most famous example of a Beaker burial, and was buried with over 100 items, including daggers, Beakers, arrowheads, gold earrings, and worked bone and antler (Parker-Pearson 2005, 75). The burial was located on the eastern side of the River Avon, peripheral to the barrow group on King Barrow Ridge which lined either side of the Avenue as 'gatekeepers' of Stonehenge (Parker-Pearson 2005, 75).

5.154 A significant development from the initial Beaker burials was the emergence of the famous 'Bush barrows' or 'Wessex I burials', characterised by their incredibly wealthy associated grave goods (Burgess 1980, 98-111). The 'Wessex Culture' burials arrived c. 2200BC, after the initial Beaker burials, and are distinguished by the prevalence of gold within their grave goods (Parker-Pearson 2005, 86), and possibly relate to the upper echelons of society, expressing wealth through the grave goods associated with the dead. A ring ditch excavated at Jugs Grave in the 1940s (WHER ST76SE600), in the Crushed Rock AS-A, contained two interments within a stone cist, associated with gold items, worked animal bone, Early Bronze Age flint arrowheads and stone. To the south of Jugs Grave two stone cairns (WHER ST76SE601) are recorded, that perhaps relate to further burials or episodes of field clearance, emphasising the agricultural setting of the barrow. The Manton Barrow (WHER SU16NE602; Cunnington 1908), in the Kennet AS-A, recorded a primary female inhumation with rich grave goods including gold ornaments. Absolute dates from the Wessex I tradition are extremely rare and it is considered a priority to improve this situation (Darvill 2005, 61).

5.155 As the second millennium BC progressed barrow cemeteries began to form, only to be gradually replaced from the Middle Bronze Age by 'flat' cemeteries comprising urned and unurned cremation burials (Fitzpatrick 2007, 114). Major excavations of barrow cemeteries within the study area include the investigations at Amesbury which recorded both inhumation and cremation burials associated with Beaker pottery (Ashbee 1984, 39). A similar mix of burial rite was recorded by the excavations at the barrow cemetery of Woodford and Winterbourne Stoke (Gingell 1988, 19), and Greenland Farm (WHER SU04SE635) in the Salisbury Avon AS-A. The initial burial at Greenland Farm was associated with Beaker pottery, subsequent to which secondary burials were placed within the barrow mound.

5.156 In the Early Bronze Age 'warrior graves' are fairly common, but later graves tend not to include weapons. Weapons have been recorded within barrows within the study area, as at Little Down (AMIE 644213; WHER SU13NW645) in the Salisbury AS-A, where an inhumation was associated with a spearhead. At Sutton Veny (ST94SW637) the male inhumation had been dismembered, suggesting pre-interment mortuary practices that perhaps involved de-fleshing the body as well as separating its component parts (Johnston 1980, 47). Rites varied hugely, and at Marston Maisey (AMIE 658419; WHER SU19NW622) in the Thames Valley AS-A, no human burials were identified but an upturned horse skull was recorded within the barrow.

5.157 Cremation burials emerge in the Early Bronze Age and had become the dominant rite, often associated with Deverel-Rimbury ware, by the Middle Bronze Age. These urned and unurned cremation burials frequently formed into barrow cemeteries, commonly located to the south and east of Early Bronze Age barrows (Fitzpatrick 2007, 114). The cremation rite became increasingly prevalent through the Bronze Age, and barrow sites eventually became the focus of Deverel-Rimbury urn fields. Cremation burials have been recorded below inverted banded bucket urns at Dilton Marsh (WHER ST84NW151) in the South-West AS-A, and at Jacks Castle (WHER ST73NW600) in the South West AS-A, which produced a primary cremation associated with a bronze battle axe and dagger. Cremation urns have been recorded from the barrows at Manor Farm (WHER SU16NW718), Rockley Plantation (AMIE 644929; WHER SU17SE627), Fox Covert (WHER SU06NE643), and North Down (WHER SU06NE723) all of which are located in the upper reaches of the Kennet Avon AS-A.

5.158 In the Salisbury Avon AS-A, cremation barrows have been recorded at Pit Meads on the flood plain of the Wylye valley (WHER ST94SW637), Sunnyhill Down (AMIE 645206; WHER SU25SW671) which produced a primary cremation and two secondary cremations, and near to Wilton Reservoir which contained an inverted collared urn containing a cremation burial (WHER SU03SE152). At Winterbourne Stoke a cremation was recorded below an inverted urn, secondary to an initial Beaker burial (Ozanne 1972, 43; WHER SU04SE653). Exotic items associated with the burial included an incense cup, two shale rings, and amber and faience beads. Three barrows at Leckford Bridge, in the Salisbury Avon AS-A, contained primary cremations, two of which were overlain by the remains of a pyre (WHER SU25SW672; SU25SW673). A third was associated with a bone pin and the skull and horns of a cow (WHER SU25SW674). Cremation burials can be richly adorned, such as the barrow excavated at Goat Woods (WHER SU14NE630) which contained a primary cremation with faience and shale beads, a shale stud and a grooved dagger, or the barrow at Golden Barrow (WHER ST94SW639) which contained two cremations associated with 13 gold beads, gold plate and two gold cones.

5.159 The excavations at Snail Down (AMIE 1501866; 645139; 645180; 645153; WHER SU25SW607; Thomas 2005) in the Salisbury AS-A recorded a significant group of barrows, predominantly associated with the cremation burial rite, and elements of a nearby Late Bronze Age boundary ditch (Thomas and Thomas 1956). Below one of the barrows a greenstone axe and pits were recorded, which relate to preceding Neolithic activity, reflecting the border pattern of Bronze Age sites in the vicinity of Neolithic activity areas. Cremation was the dominant rite at Snail Down, and a number of barrows contained multiple cremated remains (WHER SU25SW610; SU25SW611; SU25SW615; SU25SW627; SU25SW630; SU25SW632; SU25SW633; SU25SW609). These cremations were associated with relatively modest grave goods, including awls and pottery. Secondary urn burials were also recorded from the barrows, associated with beads of shale and amber (WHER SU25SW610). Structural elements within the barrows included timber posts (WHER SU25SW611), and wooden (WHER SU25SW609) and stone cists (WHER SU25SW627). Although the grave goods from Snail Down were generally modest, one of a pair of twinned barrows (WHER SU25SW630) contained a bronze dagger of continental origin. The predominant pottery from Snail Down consisted of Beaker and Collared urn wares (Thomas and Thomas 1956, 147), with a peak in barrow construction dated to c. 1600BC.

5.160 The King Barrow (WHER SU25SW631) at Snail Down included a secondary burial, associated with amber and shell beads, and a second inhumation barrow was recorded associated with shale, amber, faience and ceramics (WHER SU25SW612). To the south-west of Snail Down a bowl barrow contained a flat bronze axe, worked bone, whetstones and worked horn, but no interment (WHER SU25SW648). Several further barrows at Snail Down have previously been opened, but produced no datable evidence, including one barrow which contained an empty chalk cist (WHER SU25SW608) and a further barrow which produced no archaeological deposits (WHER SU25SW618). Surrounding the main concentration of barrows, further mounds have been recorded which possibly related to clearance or boundary markers (WHER SU25SW651), perhaps reflecting the agricultural use of the site prior to the establishment of the barrow cemetery.

5.161 Towards the end of the Early Bronze Age unmarked graves emerge that are not associated with overlying barrows, although still possessing many of the Beaker burial characteristics. Such Beaker flat graves are common in the vicinity of Avebury especially (Pollard and Reynolds 2002, 128-130; AMIE 215600; WHER SU06NE153), and three such flat Beaker graves were recorded at Cotswold Community (Powell *et al* 2010, 24), in the Thames AS-A. Further flat burials include the example recorded at Tilshead parish (AMIE 214940) and the cist burial found at Syrencot (AMIE 916839) in the Salisbury Avon AS-A.

5.162 By the Late Bronze Age burials with grave goods or overlying barrows are very rare (Darvill 2010, 221), and the burial rites for the majority of the population are not recorded archaeologically (Fitzpatrick 2007, 115). When Late Bronze Age burials are recorded, it is often in flat cemeteries or near to settlements, such as at Latton Lands (WHER SU09NE150; Stansbie and Laws 2004, 107) and Netheravon (McKinley 1999, 13). It is perhaps more likely that predominant burial rite was excarnation, followed by the secondary deposition of the bone elsewhere and excarnated remains have been recorded in the boundary ditch of Avebury henge (WHER SU16NW105; Pollard 2007, 91), and at Rockley Down (Gingell 1992) and East Chisenbury (Brown et al 1994). Late Bronze Age monumental forms, such as monumental midden sites, were not necessarily related to mortuary activities.

5.163 Within the study area there are over 30 confidently identified Bronze Age barrows. However, in addition to this figure there are over 500 potential Bronze Age barrows (the majority recorded as undated by the HER) within the study area. These have been identified from ring ditches (which would have surrounded the internal mound of a Bronze Age barrow) shown as cropmarks on aerial photographs, or as surviving earthwork mounds (Pollard 2007, 69). Although these features could date to the Iron Age or Roman period, earth mounds and ring ditches most commonly represent Bronze Age barrows, and as such any undated mounds or ring ditches have been discussed here in the Bronze Age summary (Fig 14).

5.164 There are several significant groups of these undated barrows which perhaps form sizable Bronze Age barrow cemeteries. Within the Salisbury AS-A a number of possible barrow cemeteries have been identified from aerial photography, including the barrow groups at Barrow Clump (WHER SU14NE641 – SU14NE645), Choulston Ox (SU14NE795; SU14NE796; SU14NE797), Brigmerston Corner (SU14NE690-SU14NE694; SU14NE851; SU14NE852; AMIE 645103), Wood Bridge (WHER SU15NW643-SU15NW649; SU15NW 624; SU15NW 626), and the seven undated ring ditches (WHER SU15NW656 - SU15NW661) recorded in the upper reaches of the Salisbury AS-A. In the Bristol Avon AS-A possible barrow cemeteries have been identified at Berryfield (WHER ST86SE630 – ST86SE634), north-east of Dodford Farm (ST98SE603 - ST98SE606; ST98SE624 - ST98SE626), west of Lake Cover (WHER ST98SE610 - ST98SE615), and east of Great Somerford (ST98SE616 - ST98SE620).

5.165 Elsewhere in the study area, the ploughed-out barrow cemetery (WHER SU19NE635 - SU19NE639) east of Hannington Wick Villa, in the Thames Valley AS-A, is now only visible as cropmarks, as is the large group of ring ditches (WHER ST96NE628 - ST96NE631) recorded north of Bromham House in the North-West AS-A. Elsewhere such sites have led to the identification of highly significant Bronze Age remains, such as at Barrow Hills, Abingdon, in Oxfordshire. However, the identification of ring ditches as Bronze Age barrows needs to be carried out with caution, as ring ditches do not necessarily equate to barrows, or may even be of natural origin, such as the group recorded to the east of Giant's Cave (WHER ST88SW600; ST88SW612-ST88SW613), in the North West AS-A.

5.166 Barrows are often only visible as slight spreads of chalk, such as the examples (WHER SU16NW700; SU16NW727; SU16NW727) to the north-east of West Kennet long barrow in the Kennet AS-A. The barrow group at Netheravon Down, in the Salisbury AS-A, partially survives as earthworks (WHER SU14NW605-SU14NW607), while others seem to have been removed by modern activity (WHER SU14NW608-SU14NW611). The barrow cemeteries at Landford Common (WHER SU21NE600 - SU21NE603; AMIE 645036) and The Bury Hill Plantation cemetery (WHER SU21NW600-SU21NW606; SU21NW612; SU21NW613), both in the Test Tributaries AS-A, survive as slight undated earthworks, but remain undated. Barrows can remain undated, even after excavation, such as the barrow at Newmead Farm (WHER ST83NW661) in the South West AS-A, which contained an interment of burnt bone, but no datable evidence.

5.167 Many barrows saw subsequent prehistoric or historic use. The barrow at Sunnyhill Down (WHER SU25SW670), in the Salisbury AS-A, produced coarse dark ware pottery, a Romano-British coin, and a fragment of Samian pottery, suggesting a Roman phase of use for the monument. A group of three barrows recorded at Hatt House (WHER ST86NW602-ST86NW604), in the Crushed Rock ACA, is interpreted as a possible Bronze Age or Romano-British barrow group, and similar uncertainty exists over the barrows at Scudamore (WHER ST84NE621; ST84NE646;

ST84NE672; ST84NE673; ST84NE674; ST84NE675), in the upper reaches of the River Wylye in the Salisbury Avon AS-A. Ring ditches identified by aerial photography can also relate to later prehistoric round houses, as at Latton (WHER SU09NE629; CA 1997) and elsewhere in the Thames valley AS-A (WHER SU09NE625). Several barrows saw historic re-use, such as the example at Barrow Street Lane (WHER ST83SW612) in the Stour Tributaries AS-A, and the barrow at Bear Farm in the North-West AS-A (WHER ST96NE601), which were used for the base of post-medieval windmills.

***Settlement evidence and agriculture***

5.168 There is relatively little evidence of settlement in the Early Bronze Age, and a predominantly mobile existence is often suggested (Woodward 2000, 51). Although the distinctive material culture of the Beaker period makes activity easily identifiable, the small, often oval, Beaker settlements (Darvill 2010, 174) are not as prolific or easily identifiable as the more substantial Middle Bronze Age settlements. This is primarily because the evidence is insubstantial, consisting of flint scatters, pits and hearths, which often have not survived subsequent agricultural activity. Proxy evidence of early settlement includes intense flint concentrations, such as the example taken to indicate a Bronze Age settlement in Figheldean parish (AMIE 929613; Bradley *et al.*1994, 153) in the Salisbury AS-A. However, it has been argued that Beaker domestic sites do exist, but are often in low-lying positions on Chalk Downs, now buried by hillwash (Allen 2005, 219). Pits, gullies, post-holes and ditches were recorded at Milbourne Farm and Showell Nurseries (WHER ST97SW152), associated with Beaker pottery and perhaps indicative of Early Bronze Age domestic activity in the Bristol Avon AS-A (WAM 1993, 159). Beaker period occupation is potentially recorded at Durrington Walls (WHER SU14SE100; Allen 2005) in the Salisbury AS-A. Three Early Bronze Age pits were recorded at Charlton Plantation (WHER SU12SE153) in the Salisbury Avon AS-A which contained Beaker pottery and flint implements. Pits and ditches were recorded by excavations at Granham Hill (AMIE 1485864) which relate to Early Bronze Age activity, and are typical of the ephemeral indicators of Early Bronze Age settlement.

5.169 Early Bronze Age domestic activity is occasionally found below Later Bronze Age barrows, as well as within the mound matrix itself, and has been used to suggest the deliberate positioning of barrows over former settlement sites. However, it has been recently argued that these deposits relate to the deliberate deposition of midden material at chosen barrow sites (Woodward 2000, 51). Bronze Age settlement has been recorded at Snail Down (AMIE 645151) in the Salisbury AS-A in the vicinity of the barrow cemetery.

5.170 A probable Early Bronze Age stock enclosure was recorded at Latton (AMIE 1337479) in the Thames Valley AS-A, and a similar enclosure at Cotswold Community is recorded, although this may have been a Late Neolithic and Early Bronze Age ritual enclosure (Powell *et al.* 2009, 104). An Early Bronze Age rectilinear enclosure identified at Eysey Manor (AMIE 1337476) in the Thames Valley AS-A, is also more likely to be ritualistic in nature. Earthwork enclosures associated with Bronze Age pottery are recorded at Winterbourne Gunner (AMIE 969960) and Milston Down (AMIE 867462) in the Salisbury AS-A, and Temple Farm (AMIE 969853) in the Kennet AS-A.

5.171 The Middle Bronze Age (from c. 1500BC) marked the rise of sedentary existence and the substantial post-built roundhouse, and it is from this period onwards that the evidence for sustained occupation sites emerges (Bruck 2000). Middle Bronze Age settlements are often located close to Early Bronze Age burials, which then become

the focus of Middle Bronze Age barrow cemeteries (Stansbie and Laws 2004, 139). Such association with Early Bronze Age features suggests that barrows still held resonance with Middle Bronze Age agricultural communities. With the increasing focus on agriculture, especially arable agriculture centred on emmer and spelt wheat from the Middle Bronze Age onwards, the number of farm settlements increases rapidly (Darvill 2010, 190). Middle Bronze Age settlements predominantly consisted of small farm complexes, and only very occasionally are larger village sites recorded (Fitzpatrick 2007, 113).

5.172 The Thames Valley, especially the fertile river terraces, seems to have been a particular focus for new agricultural settlements in the Middle and Late Bronze Age, and the settlement evidence for the region has been assessed in detail (Yates 1999; Lambrick and Robinson, 2009). Middle Bronze Age communities within the AS-A witnessed a rapid expansion in field construction and the emergence of managed farmlands (Yate 2007, 37-41). Excavations at Cotswold Community (WHER SU09NW152; SU09NW153; SU09NW154) in the Thames AS-A provide a typical example of Middle Bronze Age settlement, with two distinct areas of roundhouse settlement surrounded by the trappings of a predominantly pasture-based agricultural landscape (Powell *et al* 2010, 45), but positioned in the vicinity of Early Bronze Age barrows and burials. The excavations recorded roundhouses, ditches, pits and postholes, associated with Late Bronze Age plain pottery (AMIE 1337106) and focused around waterholes (possible ponds), as well as a later Bronze Age burial (Powell *et al* 2010). By the Late Bronze Age the settlements at Cotswold Community had expanded and shifted location on a number of occasions. The settlements remained unenclosed, and a number of four-posters are recorded in the vicinity (Powell *et al* 2010, 9) suggesting an increasing importance for arable agriculture as the Bronze Age progressed. Excavations nearby at Shorncote recorded further Middle Bronze Age settlement, dating to before the permanent land division of the Late Bronze, as characterised by boundary ditches at Latton, Eysey and Marston Meysey (Yate 2007, 41). It is increasingly realised that the Thames Valley represented an incredibly rich landscape.

5.173 Further settlement recorded in the Thames Valley AS-A includes the Middle Bronze Age settlement recorded at Latton Lands (WHER SU09NW152; AMIE 1509537, AMIE 1073596). This comprised several post-built roundhouses, pits and associated, presumably agricultural, ditches, all associated with Deverel-Rimbury pottery (Stansbie and Laws 2004, 107). Storage pits were also recorded at the settlement, suggesting an arable agricultural function for the settlement. The site was located within the Churn Valley, which would have formed an area of prime agricultural land in the Thames AS-A (Stansbie and Laws 2004, 140).

5.174 Away from the Thames Valley AS-A, Middle Bronze Age field systems are recorded on Salisbury Plain and Marlborough Downs (Gingell 1992), associated with enclosed settlements (McOmish *et al* 2005; Gingell 1992). Ditches have been recorded at Bury Orchard (WHER SU02NW624) in the Salisbury AS-A and a possible ditch-defined trackway was recorded at St John's School (WHER SU16NE157) in the Kennet AS-A. A Bronze Age boundary ditch and associated pottery was recorded at Brunel Road Link (AMIE 1328517) and lynchets, associated with Late Bronze Age field systems, were recorded at Coombe Down (AMIE 1129051), both in the Salisbury AS-A. A Middle Bronze Age settlement was excavated at Commonhead (AMIE 1435759) in the North West AS-A and at Milbourne Farm (AMIE 1049794) in the Bristol Avon AS-A.

5.175 The Late Bronze Age is an important period that is only now coming into focus. During the period there appears to be a decrease in the number of enclosed

settlements, and the examples recorded appear to represent unenclosed, often shifting settlements (Fitzpatrick 2007, 115). This relative decrease in the evidence of enclosed settlements comes at the same time as the demand for bronze metalwork reaches it peak (Bradley *et al* 1994, 140). Late Bronze Age settlements that are recorded share little in common with the preceding Middle Bronze Age settlements (frequently enclosed and characterised by Deverel-Rimbury pottery) and instead are more akin to Early Iron Age settlements (Bradley *et al* 1994). Late Bronze Age roundhouses have been recorded at Showell Nurseries (WHER ST97SW152) in the Bristol Avon AS-A (CA 1999b) and at Tottenham House (WHER SU26SE155) in the Central East AS-A, in the form of pits, postholes, ditches and a large quantity of Late Bronze Age-Early Iron Age pottery. Pits are a common form of Late Bronze Age evidence, and have been recorded at Boreham Farm (WHER ST84NE156) in the Salisbury Avon AS-A, which produced animal bone, molluscs, charcoal and ceramics and flints indicative of domestic activity. Excavations at Netherhampton Road (WHER SU12NW162) in the Salisbury AS-A recorded a sizable ditch and pit, with a fill of pottery and flints, interpreted as Bronze Age industrial activity, while Late Bronze Age pits identified in the vicinity (WHER SU12NW153) relate to a potential area of settlement.

5.176 A form of monument particular to Late Bronze Age Wiltshire, and the northern part of the county especially, is the monumental midden site. These appear to concentrate in the area between Salisbury Plain and Marlborough Downs (Fitzpatrick 2007, 116), although there are probably further sites awaiting discovery across the whole of southern Britain. At East Chisenbury the huge assemblage of pottery and animal bone is interpreted as the end result of ostentatious ritual display (McOmish 1996), perhaps reflecting the competitive social groups increasingly visible in the archaeological record.

***Linear earthworks***

5.177 The shift towards an agricultural society which occurred in the Middle Bronze Age was not instantaneous, but did mark a fundamental change in Bronze Age society. As agricultural competition increased, the demand for, and ownership of, land became an ever more prominent concern for Bronze Age communities in Wessex. This pressure is reflected in the creation of long linear earthworks, probably designed to display ownership and mark out territorial boundaries. In Wiltshire these large ditches and banks are known as the 'Wessex linear ditches' (Bradley *et al* 1994). These cut across Middle Bronze Age field systems in many instances (McOmish *et al* 2002; Birbeck 2006), and suggest a Late Bronze Age intensification of territorial display and land ownership. It has been suggested that these earthworks, often associated with small enclosures interpreted as cattle corals, are related to the increasing emphasis on livestock as a display of wealth and power (Fitzpatrick 2007, 115), but they come at a time in the later Bronze Age when there is still only moderate pressure on the land and resources (Bradley *et al* 1994, 139), and their exact use remains unclear.

5.178 Within the study area, these earthworks are largely confined to the environs of the Salisbury AS-A. The orientation of these earthworks reflects local topography and waterways, and Grims Ditch (AMIE 1065699) is situated on the high ground between the Rivers Nadder and Wylye, its course extending into the Salisbury AS-A at its eastern terminal. A continuation of Grims Ditch is recorded to the east of Sailsbury (AMIE 217666). Old Ditch (AMIE 1065711) extends across the northern end of a tributary of the Salisbury AS-A, and perhaps marks the boundaries of a Bronze Age or Iron Age 'ranch', the inclusion of a spring-head may be significant in this respect. Excavations along the course of Old Ditch recorded two parallel ditches

divided by an earth bank, loosely dated to the Middle or Late Bronze Age (Birbeck 2006, 99). This earthwork remained a prominent land boundary, and served as a parish boundary in the historic period, suggesting continued landscape significance.

5.179 The eastern boundaries of the Salisbury Avon appear to be a particular focus of linear earthworks, and Devil's Ditch (AMIE 223739), Brigmerston Down linear ditch (AMIE 223893), and Beacon Hill linear ditch (AMIE 929300) are all recorded in close association with one another. Late Bronze Age earthworks are recorded around Sidbury hillfort in the Salisbury AS-A (AMIE 218724, 925989, 224546).

5.180 A double line of Bronze Age pits recorded at the county boundary during the excavations at Cotswold School (WHER SU09NW155), Ashton Keynes, in the Thames Valley AS-A, suggest that the boundary may have been in existence since prehistoric times. Further undated linear ditches of possible Bronze Age date were recorded at Latton (WHER SU06NE809) in the Thames Valley AS-A (CA 1995 chase this) and the Harepit way (WHER SU06NE809) in the Kennet AS-A, which although not on the same scale as the Wessex linear ditches, perhaps represent land division on a smaller scale (Hingley 1980).

***Material culture***

5.181 The most obvious introduction of the Bronze Age is the use of metal, including copper, tin and their alloy Bronze. Bronze Age metalwork is recorded across the study area, as illustrated in Fig. 15. The majority of early metalwork is found within round barrows, and it is not until the mid second millennium BC that metalwork is regularly found in settlement and hoard contexts (Pollard 2007, 74; Fitzpatrick 2007, 112). The earliest metalwork deposits are made in the mid third millennium BC, associated with Beaker pottery, and comprised flat axes, daggers and awls of bronze, many of which were not designed to be practical and probably reflected status (Parker-Pearson 2005, 73).

5.182 As Bronze Age metalwork finds became increasingly well plotted, a genuine concentration has been recorded within Wessex. Areas of dense Bronze Age monuments, such as in the Beckhampton Down area of Avebury tend to produce densest concentrations of stray Bronze Age finds, including bronze awls, traces, razors and a spearhead (AMIE 215737). There is only limited evidence of metalwork from settlement sites, suggesting that the presence of metal was regulated. Towards the very end of the Bronze Age iron objects are occasionally recorded from settlement contexts (Fitzpatrick 2007), hinting at the increased presence of metal within settlement sites that occurs in the Iron Age. Metal is commonly found in watery contexts, apparently deposited after intentional damage, and is likely to be associated with votive water deposits (Bradley 1990; Yates and Bradley 2010).

5.183 Hoard sites, primarily of metalwork, are more unusual finds and characterise the Late Bronze Age (Fitzpatrick 2007, 112). Examples recorded within the study area include the 'Salisbury Hoard', a substantial collection of Bronze Age and Iron Age metalwork (AMIE 1194572; 1157258) which is perhaps the most significant hoard site in the study area. The hoard is unique, in both the chronological range and variety of items it contains. The earliest of which were Early Bronze Age Flat axes, and the latest of which dated to 200 BC. Over 600 items were recorded from the hoard, the location of which was subsequently chosen for an Iron Age settlement. Further hoards within the study area include the example recorded close to Avebury (AMIE 219319). Gold items are also unusual, and examples include the discovery of a gold bracelet at Eysey (WHER SU19SW150) in the Thames Valley AS-A, and

three gold plated rings from Bishopstone parish (AMIE 213921) in the Salisbury AS-A.

5.184 Weapon deposits are recorded from the study area, including three bronze socketed spearheads, a dirk blade and three bronze phalerae (WHER ST96SW150; AMIE 867424), recorded at New Road Bridge in the Melksham area of the Bristol Avon AS-A. Two of the phalerae appear to have been deliberately damaged, perhaps for ritual motives. Bronze spearheads have been recorded from watermeadows at Amesbury (WHER SU14SE165), Coombe Bissett (AMIE 1011355) in the Salisbury AS-A, near to Spye Hill (AMIE 212067) in the North West AS-A, and at Kempsford (AMIE 765450) in the Thames Valley AS-A. Due to the prevalence of finds from watery contexts, gravel quarries located on the river gravels especially have the potential to make a large contribution to the study of votive deposition. Bronze Age swords are more unusual, and the only example in the study area is that recorded from Moor Leaze Farm (WHER SU18SE158), in the North West AS-A. Single finds of bronze axes are relatively common, as are the distinctive barbed and tanged arrowheads, made from both bronze (WHER SU15SW150) and flint (WHER SU19SE151). The increasing popularity of leaf, and barbed and tanged, arrowheads through the Early Bronze Age suggest an increased prominence of the bow and arrow within Bronze Age society, and the lack of hunting evidence suggests these were predominantly for interpersonal use (Pollard 20007, 83).

5.185 Bronze working debris is comparatively rare, although has possibly been recorded below an Iron Age settlement at Hampton Hill (AMIE 867700) in the North-West AS-A. A late Bronze Age hoard found at Donhead St Mary (AMIE 206329) in the South West AS-A, contained a bronze mould, lumps of bronze, wire bundles, as well as complete socketed and palstave axes. A further founder's hoard is recorded at Ansty Hollow (AMIE 210342) in the South West AS-A, which included a single socketed axe and scraps of Bronze. Metalworking debris has been recorded from the Thames Valley AS-A (PAS WILT-FA4F72) by the Portable Antiquities Scheme. A hoard of winged and socketed axes, as well as moulds and implements likely to be used in their production, was recorded at The Clift (WHER ST82NE151) in the South West AS-A.

5.186 Beaker pottery is also a distinctive introduction of the Early Bronze Age and is recorded across the study area, and spanned the period from c.2500-1700 BC. The vessels rarely survive intact, and it is far more common to record single sherds of beaker pottery. It has been suggested that Beaker pottery was closely associated with alcohol, and analysis of residues suggests the popularity of Beaker pottery may reside in its content, rather than its form (Parker-Pearson 2005, 78). Collared urns emerged in the early second millennium BC, succeeding the Beaker pottery tradition. From the mid-second millennium BC Deverel-Rimbury pottery emerged as the dominant ceramic form (Darvill 2010, 210), superseded in the Late Bronze Age by plain wares (Fitzpatrick 2007, 108). The Late Bronze Age is often difficult to detect due to the relatively un-diagnostic nature of the ceramic record, and its chronology is largely based upon distinctive metalwork forms (Needham 1996).

5.187 As the Bronze Age progressed flint became increasingly utilitarian (Edmunds 1995), although significant finds, such as the chert dagger found at East Grimstead Farm (WHER SU22NW150) in the Salisbury AS-A, are occasionally made. Particular styles of flint production are broadly diagnostic of Bronze Age activity, but there is less evidence for specialist treatment, and metal becomes increasingly popular. Stone axes ceased to be produced, and the number of stone quern stones increased, linked to the rise in arable farming (Fitzpatrick 2007, 112). Large

assemblages of Bronze Age flints do occur however, such as the assemblage of flint recorded at Harmham, in the Salisbury AS-A, were a Middle Bronze Age burnt mound, comprising large quantities of struck and burnt flint (WHER SU12NW163) was identified, immediately adjacent to a palaeochannel. Flint quarries are generally not recorded from the study area, and the only possible example of flint extraction within the study area comprise a few shallow pits identifed at Durrington Walls (Pollard 2007, 75).

### *Conclusions*

5.188 The Bronze Age is represented by several major forms of evidence. Monumental forms, such as henge monuments and ceremonial enclosures, display a continuity of use from the Late Neolithic to the Early Bronze Age. These monumental forms are focused on the established Late Neolithic ceremonial complexes discussed in the preceding section. The most visible form of Bronze Age activity comprises round barrows, which are recorded across the study area and can occur either singly or as part of larger barrow cemeteries. Round barrows which no longer have a surface expression may also be recognised as cropmarks or by techniques such as geophysical survey.

5.189 Evidence for settlement is still limited, but greater from the Middle Bronze Age onwards. Typically, evidence for settlement has been identified by archaeological investigations prior to gravel and sand extraction on the river terraces. Evidence for agriculture, in particular field enclosures and boundaries, has also been recorded by archaeological investigations in the river terraces, and is occasionally associated with settlement sites. Large linear earthworks, which appear to be territorial in nature, are essentially peripheral to the study area and are more closely associated with the uplands, such as Salisbury Plain and the Marlborough Downs. Bronze Age material culture is dominated by metalwork and lithics which are recorded widely across the study area.

## The Iron Age (c. 800BC – AD43)

### *Introduction and chronology*

5.190 The Iron Age spanned the period from the introduction of iron, c. 800BC (Needham 2007), to the time of the Roman conquest in AD43. However, recent work suggests the chronology of the period may require further revision, in light of the especially early dates (c. 1000BC) for Iron working recorded at sites such as Hartshill Copse, Berkshill (CA 2004). The study area falls within the 'hillfort zone' of southern England, and the period has traditionally been interpreted on the basis of large hillfort sites, seen as powerful central places within an increasingly divided landscape split amongst competing agricultural communities. However, these hillforts formed just part of a wider agricultural landscape, comprising smaller enclosed and unenclosed settlement sites and agricultural features (Darvill 2010, 256). During this period an intensification and shift of settlement can be recognised, as agricultural production and competition for land became ever more significant. In relation to the older ceremonial landscapes, such as Stonehenge and Avebury environs, the Iron Age is traditionally seen as a time of relatively little activity, despite the period being well represented (Darvill 2005, 71). It seems that during the Iron Age the focus of settlement expanded from areas of high ground, especially Salisbury Plain, to valley-side and valley-bottom locations (Fulford *et al* 2006, 199). This is especially recognisable within the Thames Valley AS-A, which was a particular focus of intense Iron Age activity (as well as academic study).

5.191 The chronology of the Iron Age is relatively well understood, utilising a well developed ceramic and metalwork typology as well as radiocarbon dates (Fitzpatrick 2007, 118). However, a strong regionalisation is becoming recognised within the material culture and monuments of the period (Collis 2001, 92), and localised chronological developments are often suggested. The Iron Age has been divided into the Early, Middle and Late (Cunliffe 2005), although for the purposes of this discussion, the more convenient division into the 'Early' and 'Late' Iron Age will be utilised. The transition between these two periods occurred around 400BC, and is characterised by the appearance of small enclosed settlements, and the replacement of early simple (often univallate) forts with larger 'developed' (usually multivallate) forts. The Late Iron Age exhibits increasingly complex forms of social organisation and the rise of a monetary economy, linked to extensive, often continental, trade networks.

5.192 The tribes of Britain were recorded by Latin sources (Darvill 2010, 295), and it is understood that during the Late Iron Age the study area was situated on the boundary between several tribes. The Atrebates tribe controlled land in the eastern part of Wiltshire (seemingly up to the Wiltshire Avon, Cunliffe 2005, 168). While the Durotriges commanded the south-western area of Wiltshire, and the Dobunni occupied the northern periphery of the county. These tribal groups are largely unseen through the majority of the Iron Age, and only became archaeologically explicit with the arrival of coinage in the Late Iron Age.

5.193 Wiltshire has a long pedigree of Iron Age studies, with a number of early 20th-century investigations focusing on both enclosed and unenclosed settlement sites. The excavations at Little Woodbury (Bersu 1940; AMIE 217688; Scheduled Monument WI298), which identified for the first time the 'typical' Iron Age enclosed settlement formed by roundhouses, storage pits and a ditched enclosure, were to dominate interpretations of the Iron Age for decades to follow. These early excavations throughout Wiltshire helped secure the county a central role, as part of the wider entity of Wessex, within Iron Age studies. Iron Age sites within the study area are recorded on Fig. 17.

***Monument density***

5.194 The Iron Age monument density for Wiltshire and Swindon is relatively low at 0.24 per km², especially when compared with the densities for the Bronze Age and Neolithic periods. The density within the Sharp Sand and Gravel ACA is close to the average, at 0.22 per km², while that for the Soft Sand ACA and Crushed Rock ACA is significantly lower, at 0.07 and 0.03 per km².

5.195 The greatest density of Iron Age monuments is recorded in the Kennet AS-A, followed by the Thames Valley AS-A. These are relatively fertile areas of high agricultural potential, and this partly explains the high density of Iron Age sites. Although the Kennet AS-A has the highest density, this is largely due to residual surface finds. The Thames Valley AS-A, in contrast, has a very high density of Iron Age settlements, partly due to the fertile soils of the river terraces but also to the local soils which are conducive to the formation of cropmarks. The Thames Valley AS-A therefore represents the densest area of Iron Age settlement and activity in the study area. It is also noteworthy that the river valleys of the study area also contain large areas of alluvium, which are a result of ongoing depositional processes and may potentially mask Iron Age features.

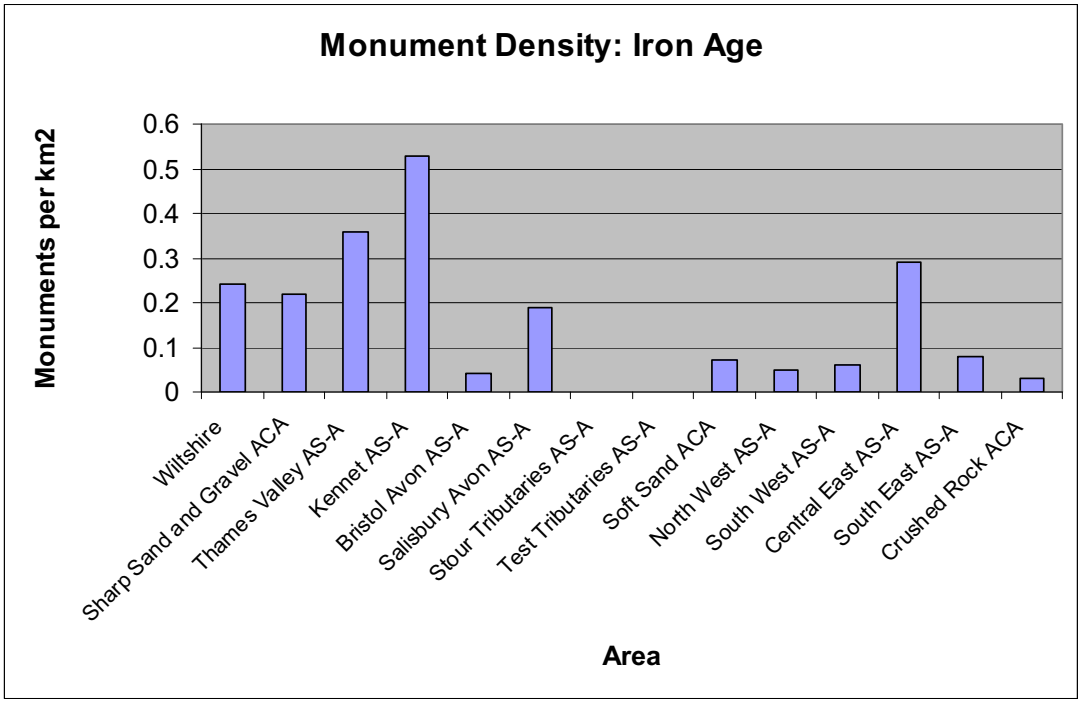
5.196 The South-West AS-A has a low monument density, but has a high frequency of Iron Age hillforts, probably due to the local topography and distinct social organisation

this fostered within the AS-A. The densities highlight the differences between the northern and southern AS-As, with greater densities recorded in the north, linked to productive agricultural areas, while fewer sites (although a high percentage of hillforts) are recorded in the uplands of the south.

Table 5.9 Monument Density: Iron Age

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 849 | 0.24 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 86 | 0.22 |
| Thames Valley AS-A (78 km$^2$) | 28 | 0.36 |
| Kennet AS-A (43 km$^2$) | 23 | 0.53 |
| Bristol Avon AS-A (83 km$^2$) | 3 | 0.04 |
| Salisbury Avon AS-A (178 km$^2$) | 33 | 0.19 |
| Stour Tributaries AS-A (10 km$^2$) | 0 | 0 |
| Test Tributaries AS-A (6 km$^2$) | 0 | 0 |
| Soft Sand ACA (342 km$^2$) | 25 | 0.07 |
| North West AS-A (95 km$^2$) | 5 | 0.05 |
| South West AS-A (160 km$^2$) | 10 | 0.06 |
| Central East AS-A (21 km$^2$) | 6 | 0.29 |
| South East AS-A (66 km$^2$) | 5 | 0.08 |
| Crushed Rock ACA (88 km$^2$) | 3 | 0.03 |

Graph 5.6 Monument Density: Iron Age




### *Hillforts*

5.197 Hillforts have dominated 20th-century discussions of the Iron Age (Fitzpatrick 2007, 117), primarily due to their overt presence in the landscape and impressive earthworks, but relatively few forts have been excavated in Wiltshire. The evidence for Late Bronze Age hillforts is growing (Haselgrove 1999, 15), but generally, early hillforts are recorded from the 6th century BC, with 'developed' hillforts emerging from the 4th century BC onwards (Cunliffe 2005). Many hillfort sites seem to pass out of use in the 1st/2nd century BC, although several seem to be occupied and defended at the time of the Roman conquest.

5.198 The morphology of hillforts is a complex and much discussed topic, and there have been numerous attempts to provide a definitive classification system (see Forde Johnston 1976; Hogg 1975). Hillforts are usually distinguished from other forms of enclosure and settlement by the size of their surrounding earthworks, prominent setting, and large internal area; although a definitive classification has not been proposed.

5.199 The purpose and role of enclosures within wider Iron Age society has been much debated (Collis 2001, 88-90; Hill 1996; Bowden and McOmish 1985; Collis 1996; Finney 2007), and they have come to be viewed as the focus of complex social interaction. It is not necessary to detail these discussions within this summary, but in essence the interpretation of hillforts as central places, and centres of production and wealth, has been challenged (Hill 2001, 101), but not replaced with entirely convincing alternatives.

5.200 One of the earliest forts in the study area is the Early Iron Age hillfort recorded at Ashleys Copse (WHER SU23SE200; AMIE 223403) in the Central East AS-A, now much reduced by gravel extraction. Fragments of Scratched Cordon Bowls recovered from the interior of the fort suggest activity in the late 6th and 5th centuries BC. A further possible Early Iron Age fort is recorded at Sidbury Camp, in the Salisbury AS-A, which is situated within a complex of Bronze Age and Iron Age boundary ditches. Excavations at Sidbury Camp (AMIE 645132; SU25SW200; AMIE 224525) recorded pottery and other artefacts, as well as internal ditches. The rampart was shown to be of two phases of construction, and evidence of temporary settlement was also recorded (Megaw 1967, 116).

5.201 A concentration of five hillforts is recorded in the South-West AS-A, where hillforts are recorded at Park Hill (WHER ST73SE200; AMIE 202597), Kenwalch's Castle (WHER ST73SSW200; AMIE 202653), Castle Rings (WHER ST82NE200; AMIE 206321), Castle Ditches (ST92NE200; AMIE 210306) and Wick Ball Camp (WHER SU03SW200; AMIE 214708), the final three strategically placed overlooking the River Nadder. Castle Rings is a univallate hillfort, enclosed by a substantial ditch (Hogg 1979, 205), within which a hoard of Durotrigian staters have been recorded. Wick Ball Camp is a univallate promontory fort overlooking the Nadder Valley, excavations within which (AMIE 643807) recorded a small amount of Iron Age pottery but no further archaeological features.

5.202 Park Hill and Kenwalch's Castle are recorded in close proximity in the South West AS-A. At Park Hill there are two phases of construction recorded, with a second phase that is clearly unfinished (Forde-Johnson 1976, 328), supporting the notion that hillforts were multi-phase sites that underwent secondary 'development' in the Late Iron Age. Kenwalch's Castle (WHER ST73SSW200; AMIE 202653) is a relatively small enclosure, at 1.6ha in size, and perhaps originated as a cross-dyke, before conversion into a hillfort.

5.203 Other areas of higher ground within the study area have produced further hillfort sites, such as the promontory fort recorded at Nash Hill (WHER ST96NW200; AMIE 212130) in the North-West AS-A. In the Crushed Rock ACA a hillfort was recorded at Bury Wood Camp (WHER ST87SW203) which was partially bivallate, and excavations recorded settlement within the fort, including quernstones indicative of cereal processing. Chisbury Camp hillfort (AMIE 224649) is recorded in the Central East AS-A, overlooking the River Kennet. It is a multivallate fort with a number of storage pits recorded within the site, as well as weapons finds, including a socketed spearhead and two swords. Chisbury Camp embodies the popular interpretation of hillfort sites, with a large storage capacity represented by pits, and evidence of

conflict and warfare, in the form of weapons finds. However, this interpretation is by no means typical of all hillfort sites, with many sites producing no evidence of conflict, settlement, or storage capacity.

5.204 Outside the South-West AS-A and other areas of upland, relatively few hillforts are recorded. However, in the Kennet AS-A the univallate Vespasian's Camp (WHER SU14SW201; AMIE 219627; AMIE 1056564) revealed two phases of Iron Age construction. The hillfort, although not located on particularly high ground, utilises a spur formed by the River Avon. A further fort is recorded at Castle Copse (AMIE 223137; WHER SU22SW603) in the South-Eastern AS-A, while possible hillfort sites are recorded at Nun's Walk (WHER ST98NW200) in the Bristol Avon AS-A, and Forest Hill Farm (WHER SU26NW203) in the Kennet AS-A. The Forest Hill Farm site possibly represents an unfinished hillfort, and finds from within the enclosure included Iron Age pottery and animal bone.

5.205 In the terminal Iron Age a distinct form of large-scale enclosure, known as *oppida*, emerge. These settlement sites have been interpreted as proto-towns, defined by extensive, often segmented, earthworks which enclose evidence for industrial activity, trade and settlement. No such sites are recorded within the study area, although large Iron Age ramparts were recorded at the town wall of Malmesbury (AMIE 1379613) in the Bristol Avon AS-A.

***Settlement***

5.206 Non-hillfort settlement sites, both enclosed and unenclosed, are increasingly common throughout the study area, with examples recorded widely across the study area. The number of identified settlements is continuing to grow, primarily lead by developer-funded archaeology and improved aerial survey techniques. Enclosed and unenclosed settlement have been dealt with together here, primarily because settlement sites often witness a transition from enclosed to unenclosed through the Iron Age. Classification is further complicated by the distinction between hillforts and large enclosures not being immediately apparent, especially when enclosures occupy a hilltop location, such as the example at Tottenham House (WHER SU26SE205), in the Central East AS-A. Further to this, settlement sites are often closely related to hillforts, such as the small enclosure (WHER SU26NE631) recorded abutting the hillfort of Chisbury in the Central East AS-A, although the exact relationship is not always clear (Hill 1996).

5.207 The prominence of unenclosed settlement within the Iron Age landscape has only been recognised comparatively recently, partly because of the difficulty in detecting such settlements archaeologically. It is increasingly realised that the unenclosed settlement, comprising a handful of timber roundhouses set within a wider agricultural landscape of field boundaries and ditches, was the mainstay of the Iron Age settlement hierarchy. These settlements normally consist of groups of roundhouses, which are often post-built and average 6-8m in diameter (Fitzpatrick 2007, 129). Roundhouses were often substantial structures, and have been interpreted as having complex spatial and symbolic organisation within (Oswald 1997; Parker-Pearson 2001, 128).

5.208 The type site for enclosed Iron Age sites in this region of the country is Little Woodbury (AMIE 217688), located in the Salisbury Avon AS-A. Excavations in the 1940s recorded post-hole roundhouses, storage pits, granary platforms and an enclosing ditch and palisade (Bersu 1940). A similar settlement site has been excavated at Harnham Hill West (WHER SU12NW204) in the Salisbury Avon AS-A, where Early Iron Age occupation was suggested by a black soil and animal bone in

the primary silts of a probable ditch, which is likely to have related to an isolated farmstead similar to the Little Woodbury settlement 2km to the east (WAM 1968, 114). A further Little Woodbury type roundhouse surrounded by a palisade trench, as well as a trackway and ancillary enclosure, were recorded at Blackford Lane (WHER SU19NE200; AMIE 222144) as a cropmark in the Thames Valley AS-A. Early Iron Age pits, post-holes and hollows were recorded close to Heywood House (WHER ST85SE205) in the North-West AS-A.

5.209 The Thames Valley AS-A, which saw the emergence of an extensive agricultural landscape in the Late Bronze Age, continued to grow in importance during the Iron Age and emerged as an agricultural powerhouse, at the expense of communities further along the Thames to the east (Yates 2007, 42). The Thames Valley AS-A exhibits a significant density of Iron Age agricultural settlement sites concentrated on the fertile river terraces, and it is perhaps noteworthy that the settlements recorded in the Thames AS-A do not correspond to any nearby hillfort sites, suggesting that the Thames Valley communities were able to thrive without the need for large defensive sites. Iron Age settlements become particularly visible from the Middle Iron Age onwards in this AS-A, and examples include the enclosure at Wetstone Bridge (WHER SU19NW204), which contained Middle Iron Age postholes and gullies, associated with pottery, large numbers of loomweights, sling shots and animal bone. Further enclosed settlements have been recorded at Bradleys Gravel Pit (WHER SU09NW200; AMIE 887897; 655186), Rixon Gate (WHER SU09SE203 AMIE 908844; WA 1992b), west of Latton (AMIE 1203251), and close to Round House (WHER SU19NW206), which contained much pottery, burnt limestone and animal bone, as well as undated gullies and pits. Further Middle Iron Age settlements are recorded at Marston Meysey (AMIE 1517472) and Eysey Manor Farm (AMIE 1337476; TVAS 2008a), and a number of roundhouses have been excavated at Latton Lands (AMIE 1462893; WA 1996) and Latton Quarry (AMIE 1509537; TVAS 2009c).

5.210 Recent excavations at Down Ampney have recorded yet further Iron Age to Late Roman activity in the Thames Valley AS-A. Excavations recorded pits and ditches probably relating to a roundhouse settlement as well as an extensive network of enclosures and trackways (CA 2009, 76). These had been intensively re-cut suggesting long-term use of these features, and the enclosures have been interpreted as specialist pastoral enclosures used for stock management, similar to those recorded at Thornhill Farm (Gloucestershire) and Claydon Pike (Gloucestershire) elsewhere in the Upper Thames Valley. Further recent excavations at Westone Bridge on the Gloucestershire/Wiltshire border in the Thames Valley AS-A have recorded possible roundhouse settlements and elements of a wider field system and network of enclosures (TVAS 2009). These too are likely to have served a specialist pastorial function, which appears to typify Iron Age economic activity in the Upper Thames Valley (Miles *et al.*2007).

5.211 The excavations at Latton recorded an extensive Early Iron Age settlement complex including a number of roundhouses associated with pits, waterholes, four-poster structures often interpreted as granaries, and animal burials. This was superseded in the Middle Iron Age by a major boundary ditch, field system and enclosures. This was followed, in turn, by Late Iron Age enclosures, as well as inhumation and cremation burials (Powell *et al* 2009, 102).

5.212 At Cleveland Farm (WHER SU09SE202; AMIE 899723; AMIE 1009080; WA 1989a and WA 1989b), in the Thames Valley AS-A, the enclosed settlement was associated with a ditched trackway and ancillary enclosures. A large roundhouse was recorded within the 35m diameter enclosure ditch, along with five further

roundhouses outside the enclosure. Organic deposits were recorded from the ditch, including wood, and available evidence suggests the site dated to the 1st century BC/1st century AD (WAM 1990, 219). Three enclosures were also recorded dating to the Middle Iron Age onwards, as well as un-enclosed huts, four-posters and a large boundary ditch (Coe *et al* 1991, 45).

5.213 Excavations at Marston Meysey Bridge, in the Thames valley AS-A, recorded Early and Middle Iron Age features including pits, postholes and gullies associated with Middle Iron Age pottery (WHER SU19NW203; SU19NW205; AMIE 658419; AMIE 1404481). The settlement consisted of a series of at least five roundhouses, adjacent to a former stream course (WAM 1993, 162). In the Middle Iron Age four areas of settlement existed, representing a mix of enclosed and unenclosed settlements, the largest of which consisted of an enclosure containing several roundhouses (WAM 1993, 163).

5.214 Excavations at Shorncote (AMIE 867896), Cotswold Community, identified a nucleated Iron Age settlement of Middle Iron Age date, as well as a stock enclosure, roundhouse and trackway (AMIE 1516575). Further excavations nearby at Cotswold Community recorded an extensive Iron Age settlement (AMIE 1337106). The Early Iron Age was represented by a series of shifting settlements, associated with waterholes, pits and four-posters (WHER SU09NW201; Powell *et al* 2010). Very little Middle Iron Age activity was recorded at the site, followed by a dramatic re-organisation in the Late Iron Age, at which point the site became the focus of a nucleated settlement, associated with a timber palisade (Powell *et al* 2010, 9). What the collective evidence from the Thames Valley shows is that in the Iron Age the major river valleys had settlement sites at c.2km intervals or closer, forming extensive networks of settlement.

5.215 Iron Age settlements are recorded from elsewhere in the study area, and concentrations (although not equalling the Thames AS-A) are recorded in the Salisbury AS-A. A Middle and Late Iron Age settlement is recorded at Fyfield Folly (WHER SU14NW201) and a possible Iron Age settlement (AMIE 926917), comprising a trackway, enclosures, pits and field system, is recorded on the boundaries of the Salisbury AS-A. At Combe Down a double ditched enclosure was recorded (WHER SU15SE203; AMIE 220385), associated with Iron Age pottery, hearths and ovens, postholes and pits (AMIE 645376), while ditches recorded at Netherhampton (WHER SU12NW206) may relate to an unenclosed roundhouse. A further possible roundhouse may be indicated by a ring ditch recorded at Wick (WHER SU12SE634), which contained Iron Age pottery and burnt flint. Excavated settlements in the Salisbury AS-A, which broadly conform to the Little Woodbury type-site, include the settlement at Marden earthworks (AMIE 643907), Harnham Hill (AMIE 644128), Southmill Hill (AMIE 644311; 903718) and the settlements identified along the course of the A36 (AMIE 655141) and the Figheldean-Netheravon main (AMIE 1076763). A dense concentration of 15 storage pits was recorded at Southmill Hill (WHER SU14SE201) in the Salisbury AS-A, three of which contained human skeletons.

5.216 Iron Age settlement has been recorded at Showell Nurseries (AMIE 1049794) in the Bristol Avon AS-A, and Early Iron Age settlement has been recorded at West Ashton (AMIE 654960; WAM 1988, 180) in the North-West AS-A. In the Kennet AS-A an Iron Age settlement is suggested at Whittonditch House (WHER SU27SE202) through a concentration of finds, including bronze and gold items, while an Iron Age site has been excavated at Glory Ann (AMIE 644975).

5.217 Since the widespread use of aerial photography from the mid-20th century the number of late prehistoric settlements identified has rapidly increased. Aerial photography has proved to be of most use in the Thames Valley AS-A, where ditched enclosures and settlements show up clearly as cropmarks on the well-drained gravels. A ditched enclosure was identified by aerial photography to the north of Cricklade, within which a number of possible roundhouses were identified (AMIE 1462701). Further settlements have been recorded as cropmarks in the Thames Valley AS-A (AMIE 1012365; 1012371; 1023835; 1073130; 1073135; 1073145; 1075041; 1075049; 1075050; 1075064), consisting of pits, small enclosures, trackways and hut circles. It should be noted that deposits of alluvium recorded in the river valleys (see Fig. 5) have the potential to mask further Iron Age settlement features.

5.218 Elsewhere the identification of settlements by aerial photography has not been as prolific as for the Thames Valley, but has had noticeable success. The river valley of the Salisbury Avon would have been agriculturally productive, and a number of settlement sites and associated field boundaries have been identified as cropmarks (WHER SU12NE602; WHER SU12SE203; AMIE 881640; AMIE 1361811; AMIE 1361848; 1361860; 1361864; AMIE 915584; AMIE 1129051; AMIE 918143; AMIE 966413). Possible enclosures have been recorded at Hayes (ST84NW612), and north of Withyslade (WHER ST92NE600) both in the South-West AS-A, and close to Seend (WHER ST96SW615), Hampton Hill, Highworth (AMIE 867705), and Church Farm (WHER ST97NE609; AMIE 867437) in the North-West AS-A. A possible banjo enclosure (AMIE 1001687), a distinctive form of Iron Age enclosure likely to be associated with livestock agriculture, has been identified by aerial photography in the Crushed Rock ACA. The role these differing forms of enclosure may have played within Iron Age society has been addressed for neighbouring regions (Moore 2006), and they are perhaps indicative of distinct forms of social organisation.

5.219 Extant undated farmstead enclosures of possible Iron Age date are recorded across the study area, including in the Salisbury Avon AS-A (AMIE 223890). Further examples include the square enclosure at Braydon Hook Bridge (WHER SU26NW614; AMIE 224741) in the Kennet AS-A, and a rectilinear enclosure recorded close to Cow Leaze Farm (WHER SU19SW203) and an enclosure recorded to the north-west of Latton (WHER SU09NE201), both in the Thames AS-A. Possible settlement sites are recorded historically at Baycliffe Farm (WHER ST83NW203) in the South-West AS-A and Marden (SU05NE204) in the Salisbury AS-A. More substantial examples include the remains of an enclosed settlement, field system and possible hillfort (AMIE 214402), occupying a hilltop on a north-east spur of downland at Ebsbury, which partially extends into the Salisbury Avon AS-A.

5.220 Less conclusive settlement evidence includes midden material and dispersed pits and gullies, representing a continuation of the distinctive midden sites of the late Bronze Age (Fitzpatrick 2007, 118). Midden material associated with pit and gully features were recorded from land surrounding Eysey in the Thames Valley AS-A (WHER SU19SW206; SU19SW205), while a further pit in the vicinity was filled with midden material including Early Iron Age pottery and animal bone (WHER SU19SW204). Elsewhere in the Thames, Iron Age pits were recorded at Latton Lands (WHER SU09NE203), which were filled with midden material. In the Salisbury Avon AS-A, pits were recorded at North End Farm (WHER ST94SW674), in association with Iron Age ceramics. Just outside the Salisbury Avon AS-A, at All Cannings Cross, large Early Iron Age midden deposits (including animal bone and pottery) have been recorded associated with possible chalk floor features (Barrett and McOmish 2004). These huge accumulations of domestic deposits perhaps relate to feasting activity or a particularly messy farmstead, and further survey is

revealing a wide landscape of similar midden sites in the Vale of Pewsey area (*Ibid*). Further domestic rubbish pits dating to the Iron Age were recorded by excavations at the Avenue to Stonehenge (WHER SU14SW207), in the Salisbury AS-A, suggesting continued, late prehistoric, use of the former ceremonial avenue.

***Agricultural landscape***

5.221 The agricultural landscape would have been of paramount importance to Iron Age communities, and the archaeological record certainly supports this supposition. The pits frequently encountered within settlement sites were probably used for the storage of seed grain (Reynolds 1981), while the well-documented four-posters common across Iron Age settlement sites are considered to be used for the storage of processed grain. Charred seed remains indicate a mixed agricultural regime, with emmer wheat gradually replaced by spelt wheat during the Iron Age.

5.222 Well-preserved field systems exist on the chalklands of Wiltshire (Bowden 2005; Fowler 2000) and give an impression of the scale of these agricultural landscapes, elements of which extend into the study area, especially the Salisbury AS-A. In the Salisbury Avon AS-A a number of field ditches and lynchets have been recorded that probably relate to the wider Iron Age agricultural landscape (AMIE 217884; 1258083; 218591; 218973; 220281; 224358; 224540; 224631; 906418; 217638; WHER ST94SW203). Collectively, this evidence perhaps suggests the Salisbury Avon region was primarily an agricultural, rather than settlement, focus.

5.223 In the wider study area, elements of a large Iron Age field system have been recorded at Wilton Down (WHER SU26SE623) and elsewhere (AMIE 224836) in the Central East AS-A. In the South West AS-A lynchets up to 3m high are recorded below Castle Ditches hillfort (AMIE 210433), and relate to the field system surrounding the hillfort. Fragmented elements of extensive field systems (AMIE 1469444; AMIE 220688) of possible Iron Age date are recorded in the Kennet AS-A.

5.224 As the landscape was increasingly turned over to agricultural use, the need to distinguish land ownership grew. This process of territorialisation was strong, and the substantial Late Bronze Age linear ditches recorded across Wiltshire, especially in the Salisbury Avon AS-A, were maintained into the Iron Age, forming imposing territorial boundaries. The pit alignments of the Upper Thames Valley region would have formed 'porous' boundaries possibly related to social as much as territorial definitions.

***Burial and ritual deposits***

5.225 Traditionally, Iron Age burials have been difficult to detect, but as scientific dating techniques are increasingly utilised on burials that are otherwise hard to date we find that many are Iron Age in date. Excarnation of the dead was probably the most common mortuary rite in the Iron Age (Webster 2007, 133), although a huge variety in practices is apparent. Inhumations, sometimes incomplete and disarticulated, are commonly found within settlement sites often in the surrounding ditches or within storage pits (Whimster 1981, 4-36). These are not normally accompanied by grave goods. Examples are rare within the study area, although burials were recorded at Latton Lands in the Thames Valley AS-A (AMIE 1462893; Powell *et al* 2009), and within storage pits at Southmill Hill (WHER SU14SE201) in the Salisbury AS-A.

5.226 A possible massacre cemetery is recorded at Werg (WHER SU26NW202; AMIE 224762; AMIE 645224), in the Kennet AS-A, which includes eight haphazard inhumations associated with La Tene brooches and pottery sherds. The burials, at least two of which were female, were associated with pottery and a large ox bone,

and appear to have buried unceremoniously, leading to the suggestion they represent burial following conflict or a massacre.

5.227 A possible cemetery was recorded at a cave site in Guy's Rift, east of Slaughterford (WHER ST87SW200; AMIE 208486; 643449; 643450), in the crushed rock ACA. Finds from the cave included human and animal bone, ceramics and flints (Hewer 1926). The cave is now a vertical fissure in the rock, and deposits from within included a hearth, representing a former occupation layer, and the remains of four adults and three children. Elsewhere in the study area few Iron Age burials are recorded, although Iron Age cremated remains were found in a ditch at Milston (AMIE 218667) in the Salisbury AS-A, associated with Early Iron Age pottery and a triangular iron knife.

5.228 In general, Iron Age burial evidence is rare and the mortuary rites for the majority of the population are not recorded archaeologically, although developer-funded archaeology is starting to redress the situation (Darvill 2010, 287). Survey techniques are revealing possible sites, such as an extensive barrow cemetery (AMIE 207513) identified from aerial photography in the Wylye Valley of the Salisbury Avon AS-A, interpreted as a possible Iron Age or Roman site. In general, however, Iron Age mortuary practices are characterised by their non-monumental nature, unlike the preceding Bronze Age.

5.229 Hoards, especially within watery contexts, offer a glimpse of possible Iron Age belief systems. These are often interpreted as 'votive deposits', intentionally discarded as acts of propitiation. The 'Salisbury' hoard, which was found at Bemerton Farm (AMIE 1157258; AMIE 1194572), is perhaps the most impressive hoard so far discovered from an Iron Age context in Britain. It represents a substantial collection of Iron Age metalwork, and is unparalleled in Britain or Europe (Stead 1998). The hoard contained over 600 items, dating from the Early Bronze Age to the c. 200BC. The hoard was deposited in a small pit, along with animal bone and pottery, and was perhaps located within an area of further Iron Age settlement, as suggested by further postholes. Perhaps the most significant objects from the hoard were a collection of miniature shields and cauldrons, with an obviously symbolic, rather than practical, use.

***Material culture***

5.230 Bronze items became widespread in the Iron Age, and distinctive decorative styles can be traced, with Halstatt decorative forms commonly found in the Early Iron Age, while successive La Tene forms dominate the Middle Iron Age onwards (Cunliffe 2005, 3). While iron is commonly used for utilitarian items, primarily weapons (WHER SU19SW201; AMIE 969748) and agricultural implements in the Iron Age, bronze continues to be used for essentially decorative items (ST87NW201; ST93SE204; ST84NW201; SU15NW207), and a particularly unusual finds from the study area is a bronze chape of a scabbard found at Beckhampton (WHER SU06NE204) in the upper reaches of the Kennet AS-A.

5.231 The introduction of coinage in the Late Iron Age was perhaps the most significant new form of material culture, and has been well studied in certain areas, such as the assemblages of north Wiltshire (Robinson 1977). Gold and silver coinage is recorded from later second century BC contexts (Haselgrove 2001, 70), and often relates to particular tribal units. Coins were typically produced from copper or bronze (WHER SU13SW214; SU26NW213; SU15NW206; ST84SW201), silver (WHER SU15SW206; SU17SE205; SU26NW210; SU26NW212; SU19NE202; SU19SW202; ST87NW200; ST93NE201; SU16NW204; SU17SE212; SU17SE213; SU15NW204;

SU15SW214; SU15SW207; SU15SW208; SU15SW210; SU15SW211) and gold (SU26NW209; SU26NW211; SU19NE201). In the study area, these coins predominantly belonged to the Dobonni tribal group, although silver coins of the Durotriges have also been recorded (WHER SU15NE221) as well as Gaulish imports (WHER SU26NE202). Larger collections of coins are occasionally recorded, such as at Upavon (WHER SU15SW204) in the Salisbury Avon AS-A, which possibly form part of dispersed hoards. Due to the prevalence of metal and the introduction of coinage in the Iron Age, the Portable Antiquities Scheme has proved especially useful, and over 200 coins from the study area have been recorded, as well as two torcs, found in the Salisbury and Thames AS-A. This huge influx of data is having a significant impact upon our understanding of the Iron Age.

5.232 Iron Age pottery typologies are well understood and have provided the basis for detailed chronologies, as well as distinct territorial regions (Cunliffe 1993, 191) In Wiltshire the earliest Iron Age pottery forms are the 'scratched cordoned' bowls (WHER SU13NE207; ST84NE207), which are superseded by decorated, tub-shaped vessels called saucepan pots (Cunliffe 1993, 193) which develop into distinct tribal ceramic forms by the Late Iron Age (Cunliffe 1993, 208). From the Middle Iron Age onwards pottery is very common at Iron Age sites and has been recorded throughout the study area, both at settlement sites and within the wider agricultural landscape.

5.233 Flint was still in use in the Iron Age (Humphrey 2003) and examples are recorded from the study area, although the forms are rather un-diagnostic and utilitarian. Stone was still being utilised, especially for quernstones, which would have been used in the processing of cereals and were a key component of the Iron Age agricultural system. At Pen Pits, the South West AS-S, a large number of pits are recorded over some 300ha (WHER ST73SE550; AMIE 202568). These pits, consisting of depressions c.9m in diameter and 3m deep, may have served as a major source of Iron Age quern stones. The deposits at Pen Pits appear to have been worked from the Iron Age through to the early medieval period.

***Conclusions***

5.234 Evidence for Iron Age activity within the study area comprises a number of broad forms. The most visually dominant form is hillforts, which can comprise very large scale univallate and multivallate enclosures. These are predominantly found in the higher western part of the study area, particularly the South West AS-A, although they occur in a range of sizes and dates. Less monumental forms of Iron Age settlement (both enclosed and unenclosed) are found across the study area, with particular concentrations in the Thames Valley AS-A, and a lesser extent the Salisbury Avon AS-A. Evidence for the agricultural landscape, such as field boundaries and trackways, is closely linked to evidence for domestic settlement in this period. Unlike earlier periods, burials are not generally associated with monumental forms, and are thus much less a feature of the Iron Age landscape. Iron Age mortuary remains are typically found in association with settlements. Iron Age metalwork can comprise larger deposits such as hoards, as well as single finds (including, for the first time, coins). From the Middle Iron Age onwards pottery is very common, both within settlement sites and the wider agricultural landscape.

### Roman (AD 43 – c. AD 410)

#### *Introduction and chronology*

5.235 This assessment uses the traditional chronology, which dates the Roman period from AD 43 to 410. While this is recognised as a simplification, it is a useful tool for discussion. Imported Roman artefacts indicate interaction with the Romanised world prior to AD 43. Conversely, Roman influence did not automatically become universal, there was frequent continuity with the Iron Age in material culture and practices post AD 43. The end of the Roman period is likewise rather less well-defined than the AD 410 date might imply. The point of transition, as well as the question of the degree of continuity between the Roman and early medieval periods versus system collapse, is a topic of much debate.

5.236 There were no *civitas* capitals or *coloniae* in Wiltshire and few "small towns". Apart from *Sorviodunum* (Old Sarum) these were in the centre and north of the county: *Verlucio* (Sandy Lane), *Cunetio* (Mildenhall) *Durocornovium* (Wanborough) and perhaps Nettleton Shrub (not in an ACA). A few other potential small towns are poorly understood (Corney 2001, 18-31). This lack of major towns is largely the result of modern Wiltshire containing parts of at least three other Roman *civitates* and not being centred on any. Around 50 villas are known in the county (plus "substantial buildings" - Corney 2001, Fig. 2.1) a huge increase in the figures known in the mid-20th century (Walters 2001, 128), 20 of which are in an ACA, especially concentrated in the North West AS-A and Crushed Rock ACA. These settlements are predominantly in clusters around the known towns. Peripheral sites can be seen as outliers of clusters around towns in neighbouring counties. The county was crossed by a number of major roads and the towns are sited along them and on major junctions (Fig. 18): these are the important roads from Silchester (ultimately London) to Sea Mills and South Wales and from Silchester to Dorchester (Portway); the Poole Harbour to Bath road; the Winchester to Old Sarum and Charterhouse road; the Fosse Way, Ermin Street and the road that joins it from Winchester. Many non-villa rural settlerments are known, some very extensive. Smaller local elements of the road network have been found and many more must have existed.

5.237 There is evidence for a military presence in the first century AD but no substantial garrison forts have been recognised (Griffiths 2001, 42-43). In the late Roman period, no military installations are known, but a military presence is indicated by finds of late Roman government/military insignia, such as belt buckles (Griffiths 2001, 52-54).

#### *Monument density*

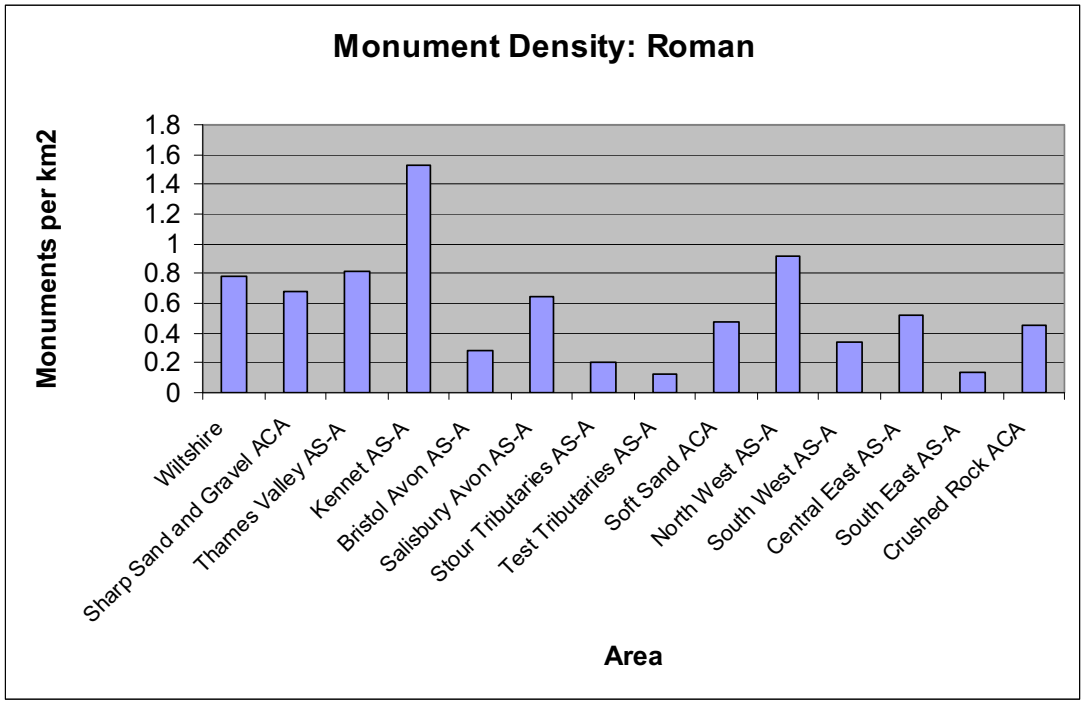
5.238 Roman monument density overall for the county is 0.78 sites per km². This compares to 1.66 in Hampshire (Young et al 2008) and 2.4 in Gloucestershire (Mullin, 2008). Figures are not yet available for Somerset. However, a map of all HER records for the counties of the South West Area Research Framework (SWARF) study (Webster 2008, Fig. 1.10) reinforces this picture of a lower density of such records in Wiltshire and shows a compararable density in eastern and central Somerset. The low figure may reflect the relatively rural character of the county, but can hardly be a result of lack of past archaeological and antiquarian interest such as could explain the even lower figure for Worcestershire (0.61). Even in areas of high archaeological activity, such as the Thames Valley AS-A, the figure is barely above the average (Table 5.10). Only the Kennet AS-A has a figure comparable to these neighbouring counties. As this is not an area of intensive

development, it must reflect real relative densities of occupation within the county, which may reflect the fact that it passes through an area of high density framed by two major roads and the triangle of settlement within them between Mildenhall and Wanborough. The relatively high density of the North West AS-A reflects the cluster of sites around *Verlucio* (Sandy Lane) and the town itself. The sharp boundary in density plotting with Gloucestershire and South Gloucestershire on Webster's Fig. 1.10 (*op cit*) suggests an artefact of collection and recording policy. Whilst considering the evidence for Roman settlement in the county, however, it should be bourne in mind that factors such as the burying of remains by later deposits of alluvium (see Fig. 5) may present biases in the patterns of frequency and distribution. Roman sites recorded within the study area are illustrated on Figs. 18, 19, and 20.

Table 5.10 Monument Density: Roman

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 2702 | 0.78 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 270 | 0.68 |
| Thames Valley AS-A (78 km$^2$) | 64 | 0.82 |
| Kennet AS-A (43 km$^2$) | 66 | 1.53 |
| Bristol Avon AS-A (83 km$^2$) | 23 | 0.28 |
| Salisbury Avon AS-A (178 km$^2$) | 114 | 0.64 |
| Stour Tributaries AS-A (10 km$^2$) | 2 | 0.20 |
| Test Tributaries AS-A (6 km$^2$) | 1 | 0.12 |
| Soft Sand ACA (342 km$^2$) | 162 | 0.47 |
| North West AS-A (95 km$^2$) | 87 | 0.92 |
| South West AS-A (160 km$^2$) | 55 | 0.34 |
| Central East AS-A (21 km$^2$) | 11 | 0.52 |
| South East AS-A (66 km$^2$) | 9 | 0.14 |
| Crushed Rock ACA (88 km$^2$) | 40 | 0.45 |

Graph 5.7 Monument Density: Roman



### *Settlement and landscape/Communications*

#### *Roads and urban settlement*

5.239 Although major changes in settlement type and pattern become evident during the Roman period, there is no evidence for any changes in population make-up or numbers as the period begins. The conquest appears to have been relatively quick and not catastrophically disruptive. Settlements continue in use across the invasion period without major change, for example, Rotherley, Forest Hill (Corney 2001, 5, 8 and 14) or Hamshill (Griffiths 2001, 42). The Forest Hill site (WHER SU26NW203) in the Kennet AS-A, just above Mildenhall (*Cunetio*), may be comparable to the Ditches at Bagendon, Gloucestershire (Trow, James and Moore 2009, 72-74) in being a high-status site making the transition under British control to a Roman polity.

5.240 Nonetheless, significant changes took place in settlement and landscape in the Roman period. The most obvious were the road system and the foundation of towns and roadside settlements.

5.241 The lines of the main roads through the county are well known (Fig. 18), both from topographical study and excavation, although major parts of the Poole Harbour to Bath road are not known on the ground. It is assumed that the roads were laid out in the first century. Ermin Street at Wanborough has been shown by excavation to have been of Neronian date (WHER SU18SE302) and the Portway at Old Sarum to be late first century in date (WHER SU13SW308). Pre-Flavian finds at Mildenhall support the common sense suggestion that the road to Bath and beyond is of a similar date (WHER SU26NW300). The Fosse Way has been sampled at several locations (WHER ST99NE300; ST99NW300; ST87NW305 and ST87SW311), but no certain dating information was obtained. Ermin Street was also sectioned at SU107938 and SU10929358 and shown to be 11m wide (WHER SU09NE300 and SU19SW300). Large numbers of smaller roads and trackways must be assumed, and while few of these are known, they have been sampled at Latton (WHER SU19NW614), Tottenham Park (WHER SU26SW306) and possibly at *Verlucio* (WHER ST96NE320), though the latter may be the main road. It is noteworthy that a number of roads cross the floodplains of river valleys (see Figs 5 and 18), and there may be some potential for the preservation of causeways/bridges in these locations.

5.242 Water transport is poorly evidenced but is widely assumed to have been of great importance in this period. It has been suggested that there is evidence of artificial water channels at Littlecote villa linking to navigation on the Kennet (13641; Walters 2001, 140-141) and that Badbury villa may have been sited to take advantage of water transport (*ibid*, 131). All the towns described in this section have access to navigable rivers.

5.243 There are four known sites that can be reasonably called towns in Roman Wiltshire; *Cunetio* (Mildenhall), *Duroconovium* (Wanborough), *Verlucio* (Sandy Lane), and Nettleton Shrub. The first two are on the Sharp Sand and Gravel ACA, essentially where roads cross rivers, and the latter two are on the Soft Sand and Crushed Rock ACAs respectively (although the last is also at a river crossing). *Sorviodunum* (Stratford sub Castle) is also a strong candidate for a Roman town. The full extent of associated settlement at all of these town sites is not completely known, and there is potential for as yet unrecognised archaeological remains beyond the known urban cores. This may include buildings constructed from timber (which survives poorly in the archaeological record), and burials, which are generally not recognisable through aerial photographs or retrieval of surface finds. It is certainly likely that extra-mural settlement lay outside of the walled towns, especially along the roads.

5.244 Only Nettleton (WHER ST87NW302) has undergone extensive excavation and seems to be essentially a religious site (Wedlake 1982), but could certainly bear re-examination both of the archive and on the ground. As published it is a curious mix of monumentality and irregular planning. The dating and phasing remain somewhat uncertain but the site may have had a late first or second century origin and continued in occupation into the sub-Roman period.

5.245 *Cunetio* (WHER SU26NW309; Mildenhall) is probably the major urban centre in the region and the only one to have been definitely (and definitively) walled (although both *Durocornovium* and *Verlucio* were enclosed, or at least work was begun on an enclosure). It is situated in the Kennet AS-A on the River Kennet and the crossing point of the *Aquae Sulis*/*Calleva* and the *Sorviodunum*/*Durocornovium* roads with each other and the river. It may succeed an Iron Age centre nearby at Forest Hill which has produced both Roman material and a Roman villa-type building and was the original goal of the road from Winchester which was only later diverted into the area of the walled town. Limited excavations and geophysical investigations have shown that the later site has a complex history and that the walls are late in the sequence, replacing an earlier ditch and bank enclosure. The known settlement area, based on a planned grid, extends well beyond the enclosed area and seems to function with, but may well pre-date, the earthwork enclosure. Both a small number of large masonry buildings and a larger number of smaller stone structures are known from aerial and geophysical prospection. One has been shown to be contemporary with the stone walls of the town, with a date after *c*. AD360. It has been suggested that the walled enclosure and large stone buildings within it represent a major change in function and/or status of the site in the later 4th century (Corney 2001, 15-18). The enclosures at this site run up to 18.5 acres, but the occupied area is perhaps three times as much.

5.246 *Durocornovium* (WHER SU18SE302; Wanborough) seems to have grown up alongside Ermin Street, but shows evidence of a planned layout, with a grid based on the main road. It is sited just north of the junction of Ermin Street with the road to Mildenhall and Winchester. Occupation along Ermin Street is dated to the Neronian period with some evidence of earlier activity. The date of the grid is uncertain, but there is some suggestion it may be Hadrianic. Despite being marked as on the Sharp Sand and Gravel ACA, it is actually on poorly drained Kimmeridge Clay (Corney 2001, 10). As with Mildenhall, a large stone building has been interpreted as a *mansio*, suggesting an origin as a *mutatio*, perhaps also with functions as a local administrative centre. This would make sense of what appear to be the remains of a circuit of walls, perhaps unfinished, thought to be of second or third-century date. The total area of occupation is thought to be over 25 acres and possibly as much as 60.

5.247 *Verlucio* (WHER ST96NE315; Sandy Lane) is the least well-known of these enclosed towns, situated in the North-West AS-A. It seems to have had a rectangular enclosure with possibly a masonry wall in the front of the bank, and the main road running straight across the enclosure. This arrangement is reminiscent of Wall or Penkridge (Burnham and Wacher 1994) and suggests the site may be a *mutation* (inn). Nothing is known of its interior arrangements but large numbers of coins from all Roman periods have been found (Moorhead 2001).

5.248 In the Salisbury Avon AS-A *Sorviodunum* (WHER SU13SW308; Salisbury) like *Cunetio*, may have had its origins in an Iron Age settlement. Although the occupation in the hill fort of Old Sarum may not have continued up to the conquest, there is evidence of later Iron Age occupation outside, in the vicinity of the road side settlement that is now thought to be the Roman *Sorviodunum* (Corney 2001, 19).

Whatever its origins it was clearly laid out along the Portway as it continued past the hill fort to the crossing of the Avon. Thus, again, this is a settlement on a river crossing of a major route. There is a hint of a grid system, the possibility of an enclosure and an area of about 25 acres is suggested. Despite the lack of detailed information, a case has been made for *Sorviodunum* to have had a status comparable to that of *Durocornovium* (Corney 2001, 22).

5.249 The roadside settlement site at Easton Grey (partially within the Crushed Rock ACA), is poorly understood, but is extensive and indicates the modification and incorporation of a pre-Roman landscape in its layout (*ibid*, 23-26). The site survives as a group of earthworks at the point where the Fosse Way crosses the River Avon. Stray finds of pottery and metalwork have been recorded in the vicinity, broadly dating the site to the 1st-4th centuries AD, but there is little stratigraphic evidence for the town (EUS 2004, 11). However, recent English Heritage excavations have identified substantial stone structures of Roman date adjacent to the river crossing (*ibid*).

5.250 The settlement of Silbury Hill (WHER SU16NW301) is, by contrast seemingly a new foundation in the Roman period, yet clearly took cognizance of the Neolithic monument. The site seems to be laid out along the main road from Bath to Mildenhall, but clearly also extends (the best known part of the site) around the eastern side of the mound, along the River Winterbourne. A 2nd to 5th-century *floruit* seems to be shown by the limited evidence, and it may be that the settlement had some religious connotations, whose growth would have been made possible by the road.

5.251 The suggestion that the now largely destroyed site of The Ham (WHER ST85SE320 in the Sharp Sand and Gravel ACA) at Westbury may have been an urban centre reinforces the point, well made by the reinterpretation of sites such as Stratton-sub-Castle and Silbury, that knowledge of towns in Wiltshire is incomplete both in detail and in extent (Corney 2001).

***Rural settlement***

5.252 Wiltshire is rich in rural settlement and in studies thereof. The failure to identify large numbers of villas until recently has led to a perception that Wiltshire had a different rural settlement pattern than neighbouring counties. While villas comparable in style and distribution to adjacent areas are now known to be more common, and indeed as numerous and of as high a quality as elsewhere (Walters 2001, 128) it is still the case that they are almost entirely absent in the south of the county west of the Salisbury Avon. This reflects their concentration around the urban centres of *Cunetio*, *Verlucio* and *Aquae Sulis* (the latter just over the county border in Bath and North East Somerset) and the lack of such centres in the south (*Sorviodunum* has no noticeable cluster, although there is a large number of villas east, towards Andover, Hants, possibly Roman *Leucomagus*). Many of these sites also fall in the ACAs (approximately 40%), including some in the Sharp Sand and Gravel Salisbury Avon AS-A (WHER SU14NW301; SU15SW304) and the upper valley of the Wylye (WHER ST94SW302), not close to any known town. The well-known, and in the 4th century elaborate, site of Littlecote villa (WHER SU27SE300) lies in the Sharp Sand and Gravel Kennet AC-S, but the majority of the villa sites in the ACAs occur on the Crushed Rock and Soft Sand ACAs.

5.253 As in other parts of the west, the villas in Wiltshire are predominantly later Roman but of a variety of sizes and levels of display. Suggested functions, not necessarily exclusive, include high status country houses, estate centres, tenanted farms, administrative headquarters and religious foundations or temples. Not enough is

known of most sites to say whether the ACA sites are a typical cross-section or form a specialized sub-set, but it appears that sites of varying kinds and sizes are to be found in the ACAs (e.g. Great Bedwyn, WHER SU26SW302; Littlecote, WHER SU27SE300 and Pitmeads, WHER ST94SW301). The economic basis of the villas appears varied, with claims for specialisation in arable, stock rearing, pig breeding and various industrial activities such as quarrying, metalworking and pottery manufacture having been made. A base in agriculture may perhaps in most cases be taken as read, with other opportunities being taken as they arose. However, some sites may have been built directly out of the profits of a particular investment, as is possible around the Savernake potteries and the Box quarries (James 2006, 12-15).

5.254 Most rural settlement was not of villa form, and, as we have noted above, this is especially true in Wiltshire, despite the increase in our knowledge of villas in the last decades. Detailed work on the chalk downs of the Salisbury Plain Training Area (SPTA) and comparison with similar studies in other chalk areas suggests that rural settlement patterns in the central south of England were changing in the early Roman period (Fulford *et al* 2006, 201-215; McOmish et al 2002). In particular, small nucleated settlements, usually described as villages, were seen to appear. Despite some evidence for iron-working and other limited craft working such as textiles, these sites were overwhelmingly agricultural, and probably predominantly arable. The particularly low standard of living seen at some of these sites is interpreted as the result of exploitative tenant/landlord relationships with richer sites, some of villa-type, in the valleys below. However, superficially similar sites in other areas were seen to be considerably richer, bespeaking a different economic basis (*op cit*, 211-213). Most non-villa sites in the south of the county are on the higher non-ACA areas. The lower areas, many by definition falling within the ACAs, seem to be more used by the higher-status sites. However, this pattern is less obvious in the hinterland of the towns, where other factors seem to come into play, and the south-eastern valley villas that seemingly exploit the higher downland settlements are perhaps best seen as part of the west Hampshire group around Andover rather than as typical of the rest of south Wiltshire (Fulford *et al* 2006, 217). Villages by contrast are seen in more upland areas further west in the county where there are, as yet, few or no villas.

5.255 Other larger rural settlements that are most simply seen as villages occur in the north of the county on the Sharp Sand and Gravel ACA of the Thames valley AS-A. These have been excavated and seen as crop marks at Ashton Keynes (WHER SU09SW300) and Latton Lands (WHER SU09NE316). The latter seems to have grown up alongside Ermin Street. As might be expected, in their layout and overall character they are closer to other sites in the Thames Valley further east, such as Standlake and Cote (Draper 2006, 12). As with the SPTA villages these sites are associated with extensive arable field systems. Another Thames-side site that might be a village is Cricklade (*ibid*). As if to confirm that these agglomerations are not dependent on geology, two more exist: one at Warleigh, over on the western side of the county on the Cotswold-limestone eastern flank of the Avon Valley (Crushed Rock ACA - WHER ST86SW300) and a possible site, perhaps industrial, at Wellhead near Westbury in the Soft Sand ACA (WHER ST85SE322). Whilst the terrace sand and gravel deposits of the river valleys are conducive to the recognition of rural settlement through cropmark evidence, features may equally be obscured by later deposits of alluvium (see Fig. 5 for deposits of terrace gravels and alluvium).

5.256 Small non-nucleated settlements, presumably farms and hamlets, form the rest of the rural pattern and the only place where these are rare (along with most other forms of settlement) is in the valley of the Bristol Avon south of White Walls (Easton

Grey, WHER ST88NE300). This rarity probably reflects the clay vale characteristics of the valley (where recognition of settlement through aerial photographs is much more difficult), as well as other factors, such as burial by later alluvium, or lack of investigation. Their relationship to the wider economic landscape is perhaps the most interesting aspect of their interpretation.

5.257 Another characteristic feature of Roman evidence in the region comprises field systems. In some places, and particularly (but not exclusively) the terrace gravels of the Thames Valley AS-A, cropmarks can be so extensive that whole landscapes can virtually be reconstructed (including settlements, roads and fields). At Crudwell (Crushed Rock ACA, WHER ST99NW300), field boundaries seem to underlie the Fosse Way, and a strong case for Roman origins can also be made for systems at Cricklade (Ermin Street, Sharp Sand and Gravel ACA), Tockenham (centred on the villa, not in an ACA) and Gastard (Bath/Mildenhall road, Crushed Rock ACA) (James 2006, 91-94 and Figs 35 to 38).

***Administrative and Governmental sites***

5.258 It has already been pointed out that there are no *civitas* capitals in the county. Some local administrative functions are assumed at *Cunetio* and *Durocornovium* and the probable existence of *mutationes* at the other centres reflects government functions. Some of the villas are likely to have housed civic functions or functionaries, but evidence for this is always going to be equivocal. Walters suggests that it ought to be possible to characterise the economic bases of villas in the county in such a away that their civic and administrative status might be understood, but while this might be reasonable, the conclusions will always, in the absence of documentary evidence, be speculative (Walters 2001, 128). Nonetheless, it is true that this theme can be addressed in such sites and not only on the urban centres. All of the towns and many of the villas are within the ACAs.

***Religion***

5.259 Nine religious sites have been identified in Wiltshire by Robinson (2001, 147), although the inclusion of two villa sites in this total show the difficulty that inevitably arises in definition. It is also likely that religious sites will have been built in towns. Indeed, the characterisation of Nettleton as a religious site as well as a town, along with the possible religious character of the Silbury Hill settlement, is an extreme example of the lack of clarity which is unavoidable in such characterisations.

5.260 Only Nettleton and Littlecote appear on the ACA database and both have been the subject of extensive excavation. The former has been published (Wedlake 1982) and the latter is *in prep (*Wessex 2010*)*. Nettleton is a settlement around a temple to Apollo Cunomaglus, and the conventional view is that it grew up to service the temple and its associated institutions. The picture is inevitably going to be more complex and nuanced than that. This is also indicated by the suggestion that Littlecote, while superficially a luxurious villa, may be a similar sort of religious foundation, an interpretation first put forward by Webster for several large villas, such as Box and Chedworth (Gloucestershire) (Webster 1983). Both Wiltshire villas are large and well-preserved sites that may well still contain much useful information and which will repay further study even without more excavation. They raise questions about function and categorisation for any future investigations of similar or comparable sites.

5.261 The rural site at Cold Kitchen Hill, is poorly known, but the finds from an inadequately-recorded 1920s excavation imply that this was an extensive site focused on a stone building with ritual or religious aspects that seem to have been

continuous through Iron Age and Roman times. It is usually assumed that the underlying beliefs of the population of Wiltshire were also broadly continuous from pre-Roman times. The *interpretatio romana* evident in epigraphic and sculptural remains would indicate as much. A caveat has to be entered to the effect that such interpretation may have occurred in Gaul before the conquest and have been imported afterwards, but the melding of Roman and native beliefs seems, in any case, a plausible assumption, based on historical and archaeological evidence. The usual range of Romano-British gods and couplings are evident in Wiltshire. Apollo has already been mentioned (the only occurrence in Wiltshire), and Mars, Minerva, Jupiter, Mercury, Venus, Vulcan and Hercules are all known. That they are represented by bronze and pipe clay figurines, as well as inscriptions, would seem to indicate a popular veneration, not confined to major centres. Shrines and the associated accoutrements would be expected in villas, and within other buildings in towns, as well as freestanding, dedicated buildings.

5.262 As with administrative and governmental buildings, such structures will be hard to distinguish from other buildings (and will, in some cases, anyway be multifunctional) and it is likely that only careful excavation, taking into account associated finds would enable their identification. Sites such as *Durcornovium, Cunetio* and *Verlucio* are more than likely to contain a variety of different religious sites. The suggestion that the settlement at Silbury Hill is religious in function or origin, also makes the point that almost any settlement may have religious potential.

5.263 Finds, or collections of them, can also indicate religious activity or belief. While these have been retrieved from Nettleton and Cold Kitchen Hill where religious structures are known (if variously recorded), the finds from Winterbourne Monkton (not on an ACA) strongly imply religious activity where no structures are yet known (Robinson 2001, 158). Similar inferences can be drawn from finds at Charlton Down (not in an ACA) and Westbury Ironworks (The Ham, WHER ST85SE320). While groups or even single finds can have implications for interpreting sites as religious ones, individual personal items such as rings with religious references may or may not indicate personal beliefs, and as stray finds do not necessarily have wider implications.

***Cemeteries and burial***

5.264 Foster records 389 known inhumation burials of Roman date in Wiltshire, "…a quarter of them single burials or with at most two individuals in close proximity…" (Foster 2001, 165). Of these only 4 cemeteries (over 36 burials, no figures for Eyewell Farm, Chilmark [WHER ST93SE311]) and 17 other individual burials occur in the ACAs (Fig. 19). The cemeteries at Nettleton Shrub (WHER ST87NW313) included 27 burials in three small cemeteries (Wedlake 1982, 90-93). A small number of burials were found at the Bradford-on-Avon villa excavations 2002 and 2003 (Corney 2004) but are not yet on the WHER. Thus the numbers for the ACAs would be at least 82 burials and 5 cemeteries, or more than 21% of the total and approximately 17.5% of the isolated burials. Fifty cremation burials are known but more are certain from less well-recorded sites where traces are noted but not quantified (Foster 2001, 171). Only one cremation burial is noted on the ACAs, however (WHER SU14NE300, Figheldean). It seems reasonable to extrapolate from these figures that the density of burials on the ACAs is likely to prove to be similar (if actually slightly less) to the overall county figure. However, it is important to note that as Roman burials were usually situated on the outer edges of settlements (in contrast to medieval villages) these have often not been identified through archaeological investigation. Part of the reason for this is that traditionally archaeologists focussed upon the urban areas of settlements rather than the outer

areas where burial would be expected. Also burials are seldom identifiable through cropmarks or through fieldwalking.

5.265 It is obvious that while stone coffins, cut graves in rock, and well-preserved human bones are often noted by non-archaeologists, cremated remains are far less likely to be noted or, indeed, to survive, as, apart from their small size and fragility, they also tend to be buried less deeply than uncremated remains. There is thus an assumed bias in the ratio of inhumed to cremated remains (Foster 2001, 171). Both rites commonly occur in the same cemetery, and where these are subject to archaeological investigation it is generally the case that cremation is the minority rite (Foster 2001, 171) but the existence of predominantly cremation cemeteries is indicated by Boscombe Down Sports Field (*ibid*; outside study area).

5.266 Both rites are very varied in detail. Cremation burials can range from a scatter of un-urned burnt bones, through the placement of ashes in pots to the use of apparently elaborate wooden or stone containers. A glass and lead container were used at Purton (*ibid*, 172). Inhumations can be crouched (e.g. WHER ST85SE328), supine, or, rarely, prone. A small number are decapitated. Eight are known in Wiltshire, a proportion not dissimilar from that known in neighbouring counties (Foster 2001, 168-9). There is some suggestion that this practice is late Roman, but cremation in the county seems to occur all through the period. The social meaning of these distinctions in not known. However, assuming, as we must on the evidence, that coffined burials are equally time-independent, it might be reasonable to assume that the presence and quality of coffins are status- and wealth-related. Crouched burials would seem to imply the continuation of a pre-Roman rite.

5.267 Grave goods are present in both inhumations and cremations, but are not especially common and coins are rare. Hobnails from studded shoes/boots are relatively common in later graves.

5.268 Most burials took place on fresh sites, but a small number of inhumations were inserted into barrows (Snail Down and Beach's Barn; *ibid*, 167). The two possible examples of cremations in barrows seem more likely to be Roman constructions in their entirety (*ibid*, 173).

5.269 One of these, at West Overton on the road between *Cunetio* and *Verlucio*, may have been a drum-shaped timber and earth mausoleum. Another mausoleum is known at North Wraxall/Truckle Hill villa (WHER ST87NW304), which contained three inhumations and one cremation (*ibid*, 172).

5.270 Villa and non-villa rural settlements have produced cemeteries and individual burials. Extra-urban cemeteries are to be expected and are hinted at at *Cunetio*, *Verlucio* and Silbury Hill. Nettleton Shrub also appears to have them. Overall, however, the evidence for urban cemeteries is sparse.

5.271 It is evident that burials are very likely to reflect a range of responses to Romanisation in the county, ranging from retention of native practices to full adoption of Roman ones. The time-scale and status-distribution of such variations would be an important research aim.

***Industry***

5.272 Apart from generic craft and production, there are two specific industries in Roman Wiltshire: pottery production and Bath stone quarrying. There is much direct and indirect evidence for the former while the later is known almost exclusively from its products.

5.273 The pottery centre at Savernake was first recognised in the 1920s and production sites confirmed in the 1950s (Timby 2001, 73). The kilns and evidence of production cover an area nearly ten miles by five in an arc south of *Cunetio*, exploiting the Tertiary clays and sands underlying Savernake forest, in the Central East AS-A, as well as the ready supply of fuel. The products served an area including Wiltshire itself and well into all the neighbouring counties except Dorset. As with the Dorset Black-Burnished-ware industry, it is now thought, (*pace* Swan, 1975) that the industry, while Romanised in production techniques, is a continuation of a pre-Roman industry, or at least a continuation of the production of similar items. The industry in its Roman form at Savernake seems to have early origins in the third quarter of the first century (Timby 2001, 79). Production declines and ceases in the later second century.

5.274 If the interpretation of the industry as a technological recasting of an indigenous industry is correct, then it is of considerable importance in any study of Romanisation. Its distribution would cast light on trade networks and transport systems and "competition" with other industries such as the New Forest and Oxfordshire kilns.

5.275 While no Roman workings of Bath stone are known in Wiltshire, the fine freestone found an early use on several sites and continued in use until the end of the period. The material occurs in abundance in easily accessible beds around Box and Corsham and along the Bristol Avon AS-A on the western border of the county. However, recent work by Kevin Hayward has indicated that the geological supply is more complex than usually assumed and that oolitic limestone can come from both further afield and more locally than might be thought at first glance (Hayward 2009). While clearly unusual or non-local stones from excavations are often analysed geologically, oolites are too easily assumed to be from the north-western outcrops. Attention paid to more careful identification will aid in locating sources and analysing distribution patterns. Indeed, a question that can be raised is whether quarrying was an industry or an *ad hoc* activity related to specific building campaigns. In support of the former view it is clear that, later in the Roman period, Bathstone items, very likely the products of quarries in Wiltshire/Somerset, are found widespread in the lowland zone.

5.276 Other stone items used other sources, such as the querns from greensand and sarsen. Production of querns is suggested from Penn Pits (WHER ST73SE550, Crushed Stone ACA) on the Wiltshire/Somerset border (Webster 2008, 156). Querns do not seem to figure as stray finds in the HER, but are noted from excavations at Collingbourne Ducis and Chilmark (WHER SU25SW311, WHER ST93SW303). Materials are not noted but the greensand nearby is a suitable one, and sarsen was available at Collingbourne. Production sites, if they survive, should be easy to identify, as at Lodsworth in Sussex (Peacock 1987).

5.277 Agriculture, based on the interpretation of commercial exploitation of the downland by villa owners, was a key economic base, and the possibility of production of cereal grain for export (or at any rate on a commercial basis, say for the army) should be considered. Villas and non-villa settlements on or adjacent to appropriate soils may have been based on this sort of activity, as with the river valley villas of the Salisbury Avon (Fulford et al, 2006). In the Roman period the first evidence for the systematic management of meadows is identifiable.

5.278 The pewter industry depends on supplies of lead and tin. As neither of these ores are available in Wiltshire it is not surprising that little evidence comes from the county. However, a workshop with furnace and stone moulds for pewter vessels was

found at Nettleton Shrub, dated to after AD 340 (Wedlake 1982, 68-74). Other finds of moulds and furnaces are known at Camerton and Lansdown (*ibid*, 67-8), and in Bath (Somerset; pers. comm. Peter Davenport) suggesting a string of workshops exploiting the transport from the Mendip lead mines provided by the Fosse Way. The single find of a pewter vessel close to the road from Charterhouse to *Sorviodunum* (WHER ST83NE305) perhaps supports this road-based distribution of pewter products and works. Some evidence suggesting copper alloy casting came from Camerton. No mould fragments were found to indicate what was being made, but the finding of coloured glass fragments in the same building as the "bronze" working evidence suggests decorative enamel work. (Wedlake 1982, 74-75).

5.279 Evidence for iron smelting and smithing, and bronze casting has been found at Nettleton, mostly in late levels (Wedlake 1982, 75). The finding of "slag" on excavations or in field walking should not be accepted as evidence of iron-working without analysis, as it can often just be 'clinker' (an incombustible by-product of coal burning). Iron smithing is to be expected on almost any settlement and is more often a response to local demand.

***Finds***

5.280 These are essentially stray finds without meaningful context. Some will have intrinsic value (financial, artistic or archaeological) others may only have value in a wider context. All have some significance. They are assumed, and in some cases can be shown to be, either from an archaeological site, but divorced from context, or casual losses with no further significance for their find spot. The numbers are, of course, increasing as a result of the efforts of the Portable Antiquities Scheme (PAS). Surface collections, or old collections whose detailed context is not known can be indications of a site of some kind. Where the finds are not from metal detectorists they will usually indicate that the site they are from is being, or has been, eroded, or disturbed in some way.

5.281 Three hundred and thirty one isolated find spots have been logged on the ACAs. 58 include brass/bronze/copper objects, of which 88 contained or consisted of coins, including eight certain plus three probable hoards (Table x.x). Seven finds of individual silver coins are also known. Ceramics are the largest group of finds, reflecting the ubiquity and survival qualities of pottery and tile. One hundred and twenty two find spots are logged, of which eight are tile. Size of the collection and condition of sherds will indicate the most likely interpretation of the collection: chance loss, manuring of fields or significant site activity.

5.282 Single finds are most easily seen as casual losses: the brooch that falls off a tunic or cloak, the spur that falls from a boot. Groups of finds, large and small, are more likely to be derived from sites where some significant activity has taken place. Hoards are a special case, and the deliberate placing of collections of coins is clearly a structured activity. Whether they should be seen as "bank deposits" or "offerings", it is difficult to say. Investigation of find spots often suggests that these hoards were not part of a wider archaeological site as such, but may indicate a site with some sort of significance or identity for the hoarder.

5.283 The sheer numbers of Roman period finds and their proportion of all collected finds compared to other periods reflect several criteria. The durability and ubiquity of Romano-British pottery, and its high level of visibility (oxidised and colour coated wares and red CBM) and the interest in the period and the county among antiquaries going back well into the 17th century are but two. The relatively widespread use of coinage is another. However, it seems that it also reflects a high level of material culture expressed in durable goods. Within this framework, the lack

of certain kinds of finds in certain areas is probably significant. The lack of coins in the South West and Bristol Avon AS-As is noticeable, but there are few areas otherwise that do not have a regular if sparse spread of coin find spots. The lack of finds in the Bristol Avon reflects the low level of any remains there, but the South West ACA between the Nadder and the Ebble does have a spread of ceramic finds spots, contrasting with the lack of coin finds. The Kennet AS-A and the area around *Verlucio* (North West AS-A) have a slightly higher number of coin finds, compared to other AS-As, as does the north end of the Salisbury Avon AS-A. The former may reflect higher archaeological interest around *Verlucio* and *Cunetio*, and this is probably also indicated by the higher density of all finds in the Salisbury Avon area.

***Conclusions***

5.284 Evidence for Roman activity is widespread and encompasses a wide range of monument types. These include villa and non-villa rural settlement, including a range of sizes and types, farms, villages and field systems. Within the study area, these forms of settlement evidence are commonly found close to known towns (including small towns), and in the vicinity of roads as roadside settlement. A noticeable concentration of both villa and non-villa settlement sites is recorded in the upper reaches of the Salisbury Avon AS-A. Small towns, may be market, religious, industrial or administrative centres or combinations of all of these (and include one centre that was massively fortified at the end of the Roman period). A greater number of towns are represented in the northern part of the study area.

5.285 Further categories of Roman evidence comprise burials and cemeteries, roads, and possible canals. The former category is particularly found in association with known Roman settlements. There is little evidence of a significant military presence at any period. Stray finds indicate some kind of Roman activity over the whole county.

**Early medieval (410-1066 AD)**

***Introduction***

5.286 The early medieval period in Wiltshire can be divided into three sub-periods: the Post-Roman/Early Saxon (5th and 6th centuries), Middle Saxon (7th to early-9th centuries) and Late Saxon (9th to mid-11th centuries) (Webster 2007b).

5.287 Discussions of this period are often framed around a chronology based on the documentary sources, including Gildas, Bede and the Anglo-Saxon Chronicles, although the limitations of this material are recognised. The transition from Romano-British to British to Anglo-Saxon has been the subject of much debate. Discussions often centre on British versus Anglo-Saxon ethnicity. These distinctions often become blurred when we consider factors of assimilation and adoption of new material culture by an indigenous population alongside traditional paradigms of invasion and migration. This aside, the archaeological record does appear to illustrate a genuine distinction between British and Anglo-Saxon sites (Webster 2007b, 167).

5.288 Wiltshire does not appear to have been under Anglo-Saxon control in the mid-5th century (Eagles 2001, 215). However, by the end of the 6th century Anglo-Saxon influence appears to have spread across the southern, eastern and central areas of the county (Eagles 2001, 219). The north-western, western and south-western areas of the county, and possibly the north-eastern area, appear to have remained British until the 7th century (Eagles 2001, 199). By the late 7th century most of Wiltshire and Swindon is thought to have been under the control of the West Saxon kingdom

of Wessex. The north-western area of Wiltshire appears to have been part of the kingdom of the Hwicce at this time. The Hwicce were most likely originally a British tribal group but were subsequently controlled by Mercia (Reynolds 2006, 148). Mercia came under the rule of Wessex in the early 10th century (Cunliffe 1993, 305). Viking invasions took place in the mid/late 9th century, and the later 10th and 11th centuries (Cunliffe 1993, 302-333).

5.289 Perhaps the best known of the early medieval sites are the Anglo-Saxon cemeteries, complete with their vast array of grave goods. Early Saxon settlement evidence (both British and Anglo-Saxon), however, is more elusive. This is probably partly due to factors such as the fact that evidence for timber buildings, the predominant structural technique of the period, does not generally survive well. Furthermore it appears that much of the native British population was largely aceramic, and material culture associated with sites is often sparse. In this context, it has been demonstrated that scientific dating is a particularly useful tool in identifying features from this period. Later in the period, settlement may be identified through the documentary sources, and below ground and extant remains. The latter particularly survives in the form of early elements of churches. The period is also represented by quantities of stray finds, including objects retrieved by metal detectorists. Early medieval sites are illustrated on Fig. 21.

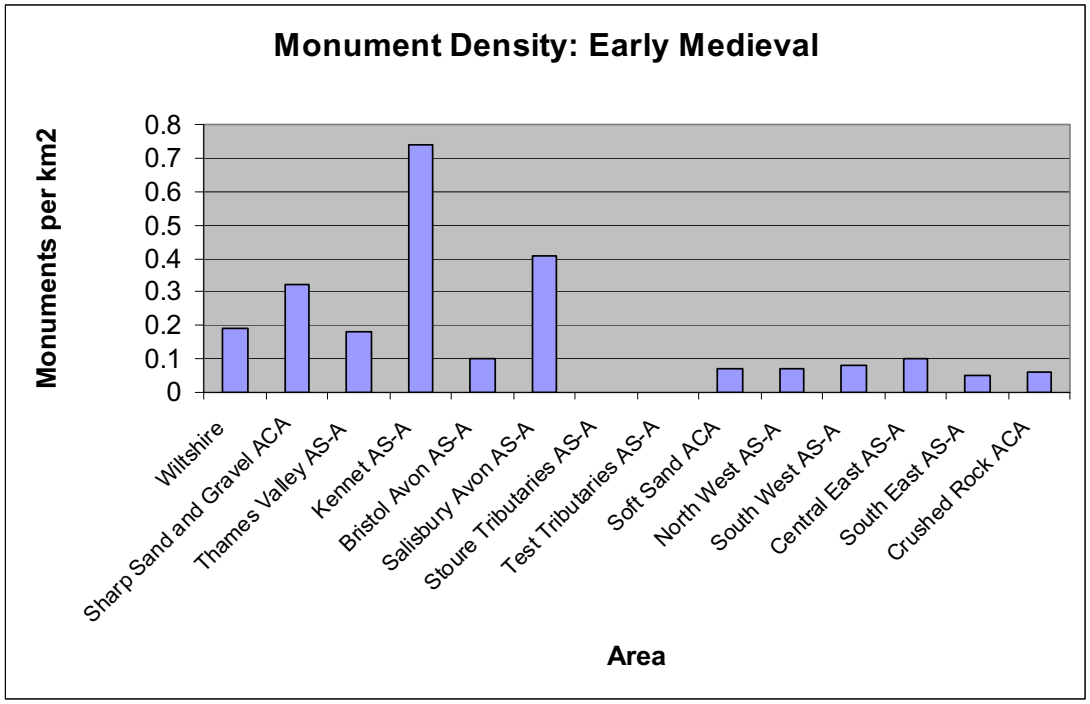
***Monument Density***

5.290 Given the often poor visibility of this period in the archaeological record, monument density for Wiltshire and Swindon is relatively high at 0.19 per km$^2$. The density of early medieval sites in the Sharp Sand and Gravel ACA is particularly high at 0.32 per km$^2$. Density in the Soft Sand ACA and Crushed Rock ACA is low, at 0.07 and 0.06 per km$^2$ respectively. The high level of sites in the Sharp Sand and Gravel ACA most likely represents a genuine focus of activity on the river valleys. Analysis of the monument densities for the Aggregate Sub-Areas demonstrates that monument densities are particularly high for the Kennet AS-A and the Salisbury Avon AS-A.

Table 5.11 Monument Density: Early medieval

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 647 | 0.19 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 127 | 0.32 |
| Thames Valley AS-A (78 km$^2$) | 14 | 0.18 |
| Kennet AS-A (43 km$^2$) | 32 | 0.74 |
| Bristol Avon AS-A (83 km$^2$) | 8 | 0.10 |
| Salisbury Avon AS-A (178 km$^2$) | 73 | 0.41 |
| Stour Tributaries AS-A (10 km$^2$) | 0 | 0.00 |
| Test Tributaries AS-A (6 km$^2$) | 0 | 0.00 |
| Soft Sand ACA (342 km$^2$) | 25 | 0.07 |
| North West AS-A (95 km$^2$) | 7 | 0.07 |
| South West AS-A (160 km$^2$) | 13 | 0.08 |
| Central East AS-A (21 km$^2$) | 2 | 0.10 |
| South East AS-A (66 km$^2$) | 3 | 0.05 |
| Crushed Rock ACA (88 km$^2$) | 5 | 0.06 |

Graph 5.8 Monument Density: Early medieval




***Settlement and landscape***

5.291 While there is some evidence of early medieval activity in towns it is not generally considered that urbanism continued in any strict sense of the term (Cunliffe 1993, 289). There is some evidence for the re-use/continuation of occupation at Roman villa sites, as at Littlecote in the Kennet AS-A (AMIE 1049406). It is also likely that many smaller, lower-status, Romano-British rural settlements continued in use into the early medieval Period as at Compton Farm, in the Salisbury Avon AS-A (Scheduled Monument 10038) or Cleveland Farm in the Thames Valley AS-A (WA 2007, 16). In some cases early medieval activity at sites may be identified from finds, such as grass-tempered pottery (Cunliffe 1993, 289; Eagles 2001, 206) although the recognition of post-Roman settlement is often hindered by a lack of diagnostic artefacts. The use of scientific dating has demonstrated early medieval phases at sites which would otherwise have been attributed to the late Roman or other period (Webster 2007, 168).

5.292 It has been argued that river valleys provided a principal route for Anglo-Saxon movement into Britain, and that early settlement would have clustered in these areas (Cunliffe 1993, 279). Recorded evidence is in fact focused on the Thames Valley AS-A, Kennet AS-A and the Salisbury Avon AS-A. Two main building forms are associated with Anglo-Saxon settlement, sunken featured buildings (also known as sunken huts or *Grubenhäuser*) and post-built halls (Booth *et al.*2007, 83). Sunken featured buildings, which comprise a large rectangular pit surmounted by a thatched, timber structure, are thought to have had a range of uses such as weaving or grain storage (ibid, 84-5). They mostly date from the 5th to late 7th-century, although also known from Middle and Late Saxon sites (Tipper 2004). Sunken features buildings are recorded from the Salisbury Avon AS-A, the Kennet AS-A and the Thames Valley ASA. Within the Salisbury Avon AS-A, four were recorded north-west of Amesbury (WHER SU14SE412/3) and one at Combe Down, a settlement site with preceding Iron Age and Romano-British phases (WHER SU15SE400; although doubt has been cast on the interpretation of the latter example in this category (Fulford et al 2006)). The latter is at. A sunken featured building was recorded to the

west of Avebury in the Kennet AS-A (WHER SU06NE402) and two (one putative) are recorded in the Thames Valley AS-A (WHER SU09SW402).

5.293 The other distinctive Anglo-Saxon built form, the post-built hall, were larger structures, thought to represent primarily living occupation but may also have incorporated other functions such as housing animals (Booth *et al.* 2007, 87). At Cotswold Community, within the Thames Valley AS-A on the Gloucestershire/Wiltshire border, three areas of early medieval activity, thought to be of mid-Saxon date were identified during archaeological excavations between 1999 and 2003 (Dodd and Powell 2010, 189-199). Within the Wiltshire part of the excavation, an isolated post-built structure (WHER SU09NW400) with a single sherd of associated Saxon pottery, was interpreted as a possible timber hall. Two other areas of activity, both within the Gloucestershire area of the excavation, included post-holes representing a timber-built structure with associated pits and waterholes, and a structure within a fenced enclosure. There was a notable lack of finds, sparse even for an Anglo-Saxon site, and the structures may not necessarily represent settlement activity but could instead have been used for livestock and grain storage (Dodd and Powell 2010, 202-204). At Latton Lands, also within the Thames Valley AS-A, a rectangular post-built structure, possibly a dwelling, was identified during archaeological works (TVAS 2009c, 11; AMIE 1509537). Early medieval pits had previously been identified in the vicinity (WHER SU09NE200).

5.294 Compared with the Early Saxon period, the Middle Saxon period demonstrates greater evidence for status differentiation at settlement sites (Booth *et al.*2007, 99). There is also some evidence to suggest that settlements were open in the Early Saxon period with the use of fenced enclosures introduced in the Middle Saxon period, as at Cotswold Community (see above).

5.295 In the Late Saxon period a pattern of nucleated villages and open field farming within manorial estates appears to have developed (Booth *et al.* 2007, 114). A noticeable characteristic of the period is that the landscape of around the 5th to 7th-centuries AD, particularly on the river terrace gravels, appears to have been much like that of the Roman and indeed the prehistoric periods. From around the 8th century settlement appears to have then nucleated into villages (Rippon 2009), and in the valleys these are situated on the floodplain edge rather than in the floodplains themselves. It is important to note that these villages are commonly still occupied, and thus representing a fundamental change in the nature of archaeological evidence from preceding periods. Evidence from excavations for Late Saxon settlement on river terrace gravels is rare, and it is likely that features are commonly located below later settlements (Booth *et al.* 2007, 114-115).

5.296 An idea of the settlement pattern in the Late Saxon period can be deduced from the documentary sources and place name evidence. Fifty-two Late Saxon settlements, referenced in the documentary sources, are recorded within the ACAs by the WHER. These are predominantly within the Sharp Sand and Gravel ACA (thirty nine), with fewer recorded in the Soft Sand ACA (nine) and Crushed Rock ACA (four). In a number of cases extant churches with Saxon elements are associated with these settlements (see *Ecclesiastical sites* below). Saxon features may also be identified in intrusive works, as at Avebury where a probable burh division was identified in excavation (WHER SU06NE407).

5.297 Urbanism was re-established in the Late Saxon period. The known extent of Cricklade Saxon walled town crosses into the Thames Valley AS-A (Scheduled Monuement WI323). This was a relatively small town, with around 35 houses

recorded at the time of the Domesday Book (Booth *et al.* 2007, 132). A mint is recorded at Cricklade in the late 10th to mid-11th centuries (AMIE 867722).

***Cemeteries and burial***

5.298 There appears to be a shift in burial practices between the Early and Middle Saxon periods. This was from large communal cemeteries in the 5th and 6th centuries to smaller sites in the 7th century, the latter more likely to be associated with an individual settlement (Booth *et al.* 2007, 104). Burial sites are often found in or overlooking river valleys (Eagles 2001, 206). Anglo-Saxon 6th-century cemeteries are known in the area of the Salisbury Avon, but west of this appear to date from the 7th century, suggesting the western area of the county may have remained British until this date (Eagles 2001, 213).

5.299 A 5th-century burial is recorded from the Thames Valley AS-A (WHER SU19NE400). Four Anglo-Saxon cemeteries are recorded within, or partially within, the Salisbury Avon AS-A at West Chisenbury (WHER SU15SW401), Broad Chalke (WHER SU02NW400) Matrimony Farm (WHER SU12SE401), and Cadley (WHER SU25SW400). Several other burial sites are also recorded from this AS-A (WHER ST94SW400; SU13NW401; SU15NW400; AMIE 218279). Cremations tend to be associated more with 'Anglian' areas rather than Saxon areas.

5.300 Wiltshire has a low number of recognised cremation burials compared to other parts of Wessex. The reasons behind this are unclear, and may represent true regional variation, e.g. a greater degree of continuation of 'British' practices, or a bias in the archaeological record (Webster 2007b, 179, after Williams 2002). No early medieval cremations are currently recorded within the ACAs.

5.301 Cemeteries often occur near prehistoric barrows (Eagles 2001, 202) and the practice of secondary-burial in barrows in the early medieval period is well documented. Intrusive early medieval burials are recorded from a long barrow within the Salisbury Avon AS-A (WHER ST93NE401). Intrusive burials, potentially of early medieval date, are recorded from a bowl barrow within the Kennet AS-A (WHER SU17SE609).

5.302 By the end of the early medieval period, burial in churchyards had become the norm (Webster 2007b, 188), as identified at All Saint's Church, Sutton Mandeville, in the South-West AS-A (WHER ST92NE404) or St Andrews Churchyard, Ogbourne St Andrew, Kennet AS-A (AMIE 644921). A secondary Viking burial is recorded on the summit of Silbury Hill, within the Kennet AS-A (WHER SU16NW406).

***Religion***

5.303 It is likely that there was some continuity of Christianity from the Roman period into the Post Roman period. However, this appears to have been limited to the western area of Wiltshire, with no evidence for continuity in the east (Webster 2007b, 183). The Anglo-Saxons converted in the mid-7th century (Cunliffe 1993, 283) and minster churches were established from the mid-Saxon period (Booth *et al.* 2007, 99). A minster was located at Wilton, within the Salisbury Avon AS-A (AMIE 1110071), and a potential minster site is recorded at Alderbury, within the Salsibury Avon AS-A and the South-East AS-A (AMIE 217645). Monastic establishments were founded in many areas in the 7th and 8th centuries (Cunliffe 1993, 316). At Malmesbury, partially within the Bristol Avon AS-A, a nunnery was founded in 603 AD followed by a monastery later in the 7th century (AMIE 212609). The founding of Benedictine Abbeys are recorded at Wilton in the 9th century (AMIE 214695) and Amesbury in the late 10th century (WHER SU14SE401) (Salisbury Avon AS-A).

5.304 Several churches, focused on the Salisbury Avon AS-A, have late Saxon elements (WHER SU26NW405; ST94SW402; AMIE 220184; AMIE 217634; AMIE 225904; AMIE 212438) and associated settlements are recorded for the majority of these sites (see settlement above). Parish churches are generally thought to have originated in around the 10th to 12th centuries, at a time when settlements had largely nucleated away from the major floodplains.

### *Wansdyke*

5.305 Wansdyke is a linear earthwork with a ditch to the north which crosses Wiltshire and North East Somerset, and putatively North-Somerset. The earthwork is generally discussed in two sections: West Wansdyke, located in North East Somerset, and East Wansdyke, which extends across Wiltshire from Morgan's Hill, south-east of Calne, to Savernake Forest, south-east of Malborough. The relationship between the East and West Wansdyke, and whether joined or not, is debatable, although a Roman road does appear to run between the two sections (Webster 2007b, 189). East Wansdyke crosses part of the Kennet AS-A (Sharp Sand and Gravel ACA) in the vicinity of West Wood (Scheduled Monument).

5.306 East Wansdyke is thought to have been located to control movement along the Ridgeway, from the Marlborough Downs to the Salisbury Plain (Fox and Fox 1969). It is generally considered to be of early medieval date, a 5th-, or possibly 6th-century boundary (Cunliffe 1993, 294; Fowler 2001, 196), constructed by a Post-Roman, British population against Saxon invasion from the Thames Valley (ibid). An alternative interpretation, albeit one less favoured at present, is that it is of Middle Saxon construction, defining a boundary between Wessex and Mercia (Reynolds 1999, 85; Cunliffe 1993, 294; Webster 2007b, 189).

### *Industry*

5.307 Quarrying for building stone at Penn Pits, partially within the South-West AS-A, is recorded in the Iron Age and Roman periods and continued into the early medieval period (AMIE 202568; Scheduled Monument). Early medieval quarrying of Bath freestone, the edge of which extends into the Crushed Rock ACA, is recorded at Hazelbury (AMIE 208050). Stone from this quarry is reported to have been supplied to Malmesbury Abbey (ibid).

5.308 An early medieval bowl furnace was recorded during intrusive works at Naish Hill, in the North-West AS-A (AMIE 655112).

### *Finds*

5.309 In addition to finds identified in intrusive works, both stratified and unstratified, a relatively large amount of material has also been recovered as chance finds and from non-intrusive works. While Post-Roman material can be difficult to identify, there is a wide range of clearly identifiable Anglo-Saxon finds including brooches and strap ends. This includes material recorded by the Portable Antiquities Scheme as well as material detailed on the WHER and AMIE. Finds are concentrated in the Sharp Sand and Gravel ACAs, predominantly within the Thames Valley AS-A, the Kennet AS-A and the Salisbury Avon AS-A. This appears to reflect a genuine focus of activity in these areas, rather than a collection bias.

### *Vikings*

5.310 Danish (Viking) invasions took place in two main periods: those of *c.* 840 and 880 and subsequently those in the later 10th and 11th centuries (Cunliffe 1993, 302-4, 330-333). In the 9th century attacks on Wessex included the battle of Wilton in 871 AD, thought to have been located at Wilton in the Salisbury Avon AS-A (AMIE 214667). Raids on Britain from *c.* 980 AD culminated in 1016 with the proclamation of Cnut as king of England (Cunliffe 1993, 332). A battle between Cnut and English forces is recorded at Sherston, within the Crushed Rock ACA, in 1016 AD (AMIE 208600).

### *Conclusions*

5.311 Evidence for earlier Saxon occupation is generally from excavated sites, comprising sunken-feature buildings and post-built halls. There is evidence for settlement continuity at Romano-British rural settlement sites into the early medieval period, although identification can be hindered by a lack of diagnostic artefacts. Excavated sites are recorded in the main river valleys within the study area, comprising the Thames Valley AS-A, Salisbury Avon AS-A and Kennet AS-A. Documentary sources, such as the Domesday Book, provide evidence for settlement established by the late Saxon period, although many of these may have originated at an earlier date. Many of these sites comprise existing towns and villages, thus representing a fundamental change in the nature of archaeological evidence from preceding periods. Early medieval burials are generally rare, although where found they appear to favour locations overlooking river valleys, such as the Thames Valley AS-A and Salisbury Avon AS-A, or in the vicinity of prehistoric monuments. A number of extant churches within the study area have Anglo-Saxon origins. Early medieval finds are generally rare, but those examples recorded have commonly been identified through metal-detecting.

## Medieval (1066-1540 AD)

### *Introduction*

5.312 The medieval period spans the time from the Norman Conquest in 1066 to the Dissolution of the Monasteries *c.* 1539 (Rippon and Croft 2007, 193). It may be further sub-divided into the high medieval period and the late medieval period, dating from the 11th to 14th centuries and the 14th to 16th centuries respectively (Dalwood 2007, 123). The former represents a period of growth, building on the foundations laid out in the early medieval period, before decline in the 14th and 15th centuries (Rippon and Croft 2007, 193; Bettey 1986, 82).

5.313 During the high medieval period Wiltshire, and the South West in general, saw an increase in population with corresponding expansions in settlement and farming. New settlements were established and many areas of marginal land were subject to cultivation (Bettey 1986, 82). A reduction in the size and extent of settlement and agriculture in the 14th and 15th centuries has been linked to a number of factors, including population pressures and plague. Climatic influences are now thought to have been less of an influence upon this process than previously suggested, especially in lowland areas. Of the latter, the most commonly cited is the Black Death of the mid 14th-century (ibid).

5.314 Studies of the medieval period can reference a range of sources including historic documents, place names, aerial photographs, studies of the historic landscape, standing buildings and intrusive archaeological works. Excavated archaeological

sites can often be dated by reference to an established ceramic sequence (Rippon and Croft 2007, 193). Ideally research will draw on a breadth of sources to give the widest possible understanding of the period. All medieval sites recorded on the WHER are illustrated on Fig. 22. Selected sites and site-classes discussed in the text are illustrated on Figs. 23-26.

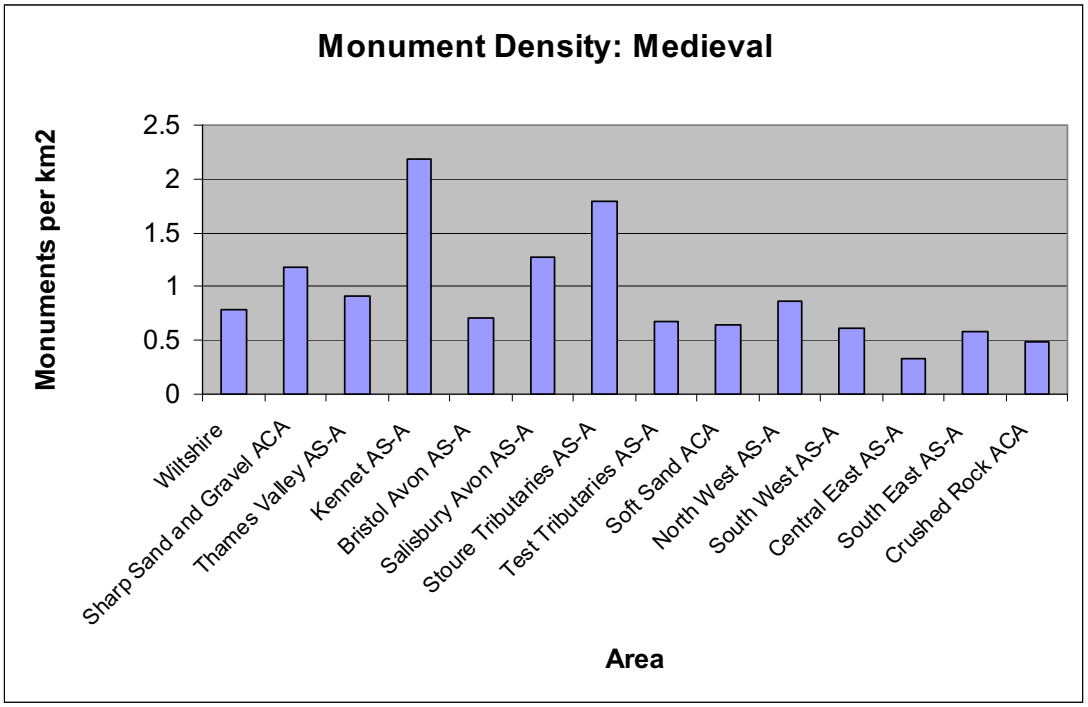
### *Monument Density*

5.315 The 'sites' documented in Table 5.12 below include all evidence categorised as medieval in Wiltshire HER, and includes both 'archaeological' sites, and settlements still occupied where medieval material has been recorded. It does not comprehensively include other evidence sources such as documentary references to medieval settlement. There is a sharp rise in the number of known sites in the medieval period, compared to the early medieval period, which is unsurprising given the greater visibility of sites of this period. However, for Wiltshire as a whole the figure is the same as the Roman period at 0.78 per $km^2$. Within the three ACAs there is a higher density of medieval sites than for any other period (with the exception of sites of uncertain date). The increase is particularly pronounced for the Sharp Sand and Gravel ACA, which has a monument density of 1.18 per $km^2$, higher than the 0.78 per $km^2$ recorded for Wiltshire and Swindon. Analysis of the densities for the associated Aggregate Sub-Areas indicates concentrations of activity within the Kennet AS-A, the Salisbury Avon AS-A and the Stour AS-A. Monument densities for the Soft Sand ACA and the Crushed Rock ACA are lower than for Swindon and Wiltshire as a whole at 0.65 per $km^2$ and 0.49 per $km^2$ respectively, although there is a concentration of activity within the North West AS-A, which has a slightly higher density than for Wiltshire as a whole, 0.86 per $km^2$ compared to 0.78 per $km^2$.

Table 5.12 Monument Density: Medieval

| Area | Number of Records | Density ($km^2$) |
|---|---|---|
| Wiltshire (3485 $km^2$) | 2734 | 0.78 |
| Sharp Sand and Gravel ACA (398 $km^2$) | 471 | 1.18 |
| Thames Valley AS-A (78 $km^2$) | 71 | 0.91 |
| Kennet AS-A (43 $km^2$) | 94 | 2.19 |
| Bristol Avon AS-A (83 $km^2$) | 58 | 0.70 |
| Salisbury Avon AS-A (178 $km^2$) | 227 | 1.28 |
| Stour Tributaries AS-A (10 $km^2$) | 18 | 1.80 |
| Test Tributaries AS-A (6 $km^2$) | 4 | 0.67 |
| Soft Sand ACA (342 $km^2$) | 224 | 0.65 |
| North West AS-A (95 $km^2$) | 82 | 0.86 |
| South West AS-A (160 $km^2$) | 97 | 0.61 |
| Central East AS-A (21 $km^2$) | 7 | 0.33 |
| South East AS-A (66 $km^2$) | 38 | 0.58 |
| Crushed Rock ACA (88 $km^2$) | 43 | 0.49 |

Graph 5.9 Monument Density: Medieval




***Towns and infrastructure***

5.316 During the medieval period, new towns were established, and existing centres expanded (Bettey 1986, 47). At the beginning of the medieval period the Domesday survey identified eight boroughs in Wiltshire, with an additional seventeen by the end of the high medieval period (Bettey 1986, 50). These new towns were planned and display distinctive street patterns. One town, Lacock, is recorded within the ACAs (within the Bristol Avon AS-A; Fig. 24). The absence of other towns is due to the exclusion of urban areas from the ACAs. There was an associated increase in trade and development of infrastructure. Evidence of improvements to the road network included the construction of bridges, two of which are recorded at Lacock (WHER ST96NW468 and 483). Other later, post-medieval, bridges may have been preceded by medieval structures for which no evidence survives. The line of roads and trackways may be identified through landscape analysis, and also where mentioned in documentary sources. It is further becoming apparent that contrary to popular opinion, there is evidence for the canalisation of rivers in the medieval period, although no direct examples are recorded within the study area.

***Castles***

5.317 Castles, constructed after the Norman Conquest, are a distinctive feature of the high medieval period. These monuments most often survive as motte and bailey earthworks (Fig. 23). Where recorded within the ACAs, these sites are focused on the western area of the county. Smaller military ringworks are also known (Bettey 1986, 14), and a possible example is recorded within the Salisbury Avon AS-A (WHER SU03NE452). Old Wardour Castle, within the South West AS-A, is more truly a fortified manor house constructed in the 14th century (WHER ST92NW454).

### *Rural settlement and landuse*

*Manor Houses and associated features*

5.318 The primary land unit in the medieval period was the manor, often focused on the manor house. Manor houses are often associated with moated sites (Fig. 23). However, moated sites are relatively rare in Wiltshire compared to other areas of the country such as the central Midlands (Lewis 1994, 184; Wilson 1985, 29-31). Within Wiltshire they are most common in the north-western area of the county (ibid), perhaps at least in part as the geology in this area is more suited to holding water within the moat. Moats are most commonly located in lowland areas with a clay subsoil (Wilson 1985, 29). Moated sites are recorded within the Thames Valley AS-A, the Bristol Avon AS-A, the North-West AS-A and the western and southern parts of the Salisbury Avon AS-A. The main phase of moat construction ran from the mid 12th to 15th century (Wilson 1985, 8).

5.319 In addition to moats, features commonly associated with manors include deer parks, rabbit warrens, fishponds and dovecotes (Fig. 23). The distribution of these sites within the ACAs is slightly weighted towards the northern and western area of the county, rather than any single ACA or AS-A. Manor houses may also have an associated church. The manor house was sometimes located adjacent to associated settlement (e.g. the village), or alternatively a little distance from it.

*Villages, hamlets and farmsteads, including shrunken and deserted settlement*

5.320 Although many settlements established in the early medieval period continued in use into the 11th century and beyond, population increase through the high medieval period led to an expansion in settlement numbers. The HER records over four hundred medieval settlements across the ACAs (Fig. 24). These records are from a variety of sources, but it is recognised that it does not represent a comprehensive data set of available evidence for medieval settlement (it does not, for instance, include a comprehensive review of documentary references to medieval settlement). There is no strong focus on any particular ACA, indicating the widespread and universal nature of settlement at this time.

5.321 This growth was not sustained into the late medieval period. Earthworks associated with deserted, shrunken or shifted medieval settlement are recorded for approximately half of the four hundred settlement sites recorded in the ACAs (Fig. 24). Such sites are commonly referred to as Deserted Medieval Villages (DMVs), but may include both deserted and shrunken settlements, as well as those demonstrating settlement shift. This decline did not necessarily occur in the medieval period, and indeed it should be noted that some earthworks attributed to the medieval period may in fact be post-medieval. However, there was a genuine reduction in settlement in the late medieval period. Population decline, a reduction in arable agriculture due to higher demand for wool (see below) and the creation of deer parks are all cited as causes (Bettey 1986, 110).

5.322 Evidence of medieval settlement may also be found in extant structures or during intrusive archaeological works. Elements of medieval buildings may potentially survive unrecognised within later structures. In some cases medieval elements may only survive below ground, either within the foundations of the extant structure, or as part of a separate, earlier building.

*Field systems*

5.323 The population growth in the high medieval period resulted in increasing demand for arable agricultural land. Ridge and furrow earthworks are usually a feature of core

agricultural areas, are usually found on relatively flat land, and is usually a sign of the conversion of arable land to permanent pasture. Medieval ridge and furrow earthworks have a distinctive reverse 'S' shape in plan, and tend to be wider than their post-medieval or modern counterparts. Clear, extant earthworks may survive in areas not since ploughed, or may be visible as earthworks on 1940s aerial photographs (which were generally taken in winter) where areas did not return to arable use until the later 20th century. Earthwork strip lynchets provide evidence of the cultivation of even steep slopes (what may be termed more 'marginal land') in this period. Ridge and furrow distribution does not appear to have been comprehensively incorporated into the WHER, and therefore its distribution within the study area is not illustrated on the Figs. 23-26. Distinctive 'dog leg' field boundaries can also indicate former medieval field systems, many of which survive today as hedged boundaries. In areas that lacked open-field systems, surviving field enclosure boundaries may also be of medieval origin, and thus as old as ridge and furrow earthworks.

5.324 There is also evidence for assarting, clearing areas of forest for agricultural use. This included assarting of the royal forest of Melchet in the parish of Whiteparish, which includes part of the South East AS-A, in the south-east of Wiltshire (Bettey 1986, 46). In the late medieval period a decrease in population and higher demand for wool led to a reduction in the cultivation of arable land (Bettey 1986, 108).

5.325 A monument peculiar to north-east Wiltshire, with some examples known in Oxfordshire, is the Highworth Circle. These enclosures, generally sub-circular in form, are undated but it has been suggested that they may be medieval stock enclosures. Four sites are recorded in the far eastern area of the Thames Valley AS-A (all Scheduled Monuments).

***Royal forest***

5.326 Large areas of Wiltshire were royal forests by the 13th century (Bettey 1986, 5), such as the forest of Pewsham, which extended into the North West AS-A (WHER ST97SE457) or the New Forest, which may have extended into the very southern area of Wiltshire (South East AS-A/ Test AS-A/ Salisbury Avon AS-A; AMIE 762123 and 220205).

***Churches and other religious sites***

5.327 Following the Norman Conquest new monastic institutions were founded, and old ones expanded (Bettey 1986, 66). Several priories and abbeys are recorded in the ACAs, mostly in the northern area of the county. Few new monasteries were founded in the late medieval period, although the estates of the existing institutions still dominated the area (Bettey 1986, 89). The possible location of a bishops palace, recorded in 13th-century documentary sources and potentially identified in works in the 1950s and 60s, is located within the Salisbury Avon AS-A (AMIE 217911). It is not uncommon to find hospitals associated with ecclesiastical sites. Less common sites include hermitages, such as that recorded at Bentley Wood (AMIE 969994). A preceptory (headquaters) of the Knights Hospitallers is recorded within the South West AS-A (Fig. 25).

5.328 The system of parish churches developed in the high medieval period (Bettey 1986, 75-77). It is common to find elements of medieval structures surviving within parish churches, although the buildings have generally undergone many phases of extension and upgrading in the subsequent periods. Churches with medieval elements are recorded across the ACAs. Other religious sites include chapels and crosses, or cross bases are, also relatively common.

### *Industrial sites*

5.329 Perhaps the most common site type which provides evidence of medieval industry is the mill. These are often recorded in documentary source, including the Domesday survey but may also be identified through upstanding or below-ground remains. Mills generally utilise either water or wind power, and sites may have continued in use into the post-medieval and modern periods, generally with new structures being constructed. Several mills are recorded within the ACAs, distributed across the county (Fig. 26). With the exception of a windmill at Windmill Hill in the North West ASA (WHER SU07NE454), these are watermills. Mills invariably processed a range of products, including corn, although they were also an important feature of the woollen cloth industry. This was an important trade in the South West in the high medieval period (Bettey 1986, 61). Fulling is a process of cleansing and thickening cloth and fulling mills, developed in the high medieval period, became widespread in the 14th century (Bettey 1986, 115). Two fulling mills are recorded in the Bristol Avon AS-A, these comprise Bulkington Mill (WHER ST95NE476) and Stowford Mill (AMIE 1305583). Mill leats may also survive even where a mill does not, and highlight the importance of looking at this period in a wider landscape context.

5.330 Evidence for pottery manufacture in the form of kiln sites or kiln debris is recorded in the western and northern areas of Wiltshire, in the South West AS-A (WHER ST84SE463), the North West AS-A (WHER ST96NE451 and ST96NW451; AMIE 1332591) and the Thames Valley AS-A (WHER SU09SW451). Pottery production is recorded at Crockerton, in the South West AS-A, in 13th-century documentary sources (AMIE 1269058) (Fig. 26).

5.331 A Jurassic Oolite quarry with possible medieval origins is recorded within the Salisbury Avon AS-A at Chicksgrove (WHER ST92NE462). Limestone quarrying is also recorded in the Crushed Rock ACA. It has been suggested that gravel pits in the Thames Valley AS-A, identified on aerial photographs, could be of medieval origin (AMIE), although the date of these sites is not proven. A small concentration of iron extraction and smelting sites is recorded in the North West AS-A (WHER ST96NW452, 461 and 480).

### *Finds*

5.332 Recorded medieval finds are common across the ACAs. As well as pottery assemblages or other finds identified in intrusive works (unstratified or associated with archaeological features), these include material collected during fieldwalking and chance finds or finds by metal detectorists. Of the latter, a hoard of around 60 medieval gold and silver coins was recorded in the South-West AS-A (WHER ST84SE452) and a hoard of around 100 coins has been recorded from the Crushed Rock ACA (WHER ST86NW471).

### *Conclusions*

5.333 Evidence for medieval activity is widespread and encompasses a wide range of monument types. Some medieval monuments such as castles and moated manor houses form a prominent part of today's landscape. Castles are generally quite rare, although the distribution of such fortified sites is noticeably focussed towards the west of the study area. Moated manor houses, on the other hand, are more highly represented in the north-west of the study area. Around 400 medieval settlements are recorded across the study area, in a pattern of dispersed settlement. Around half of these comprise sites of deserted or shrunken settlement, and the remainder remain as villages, hamlets or small towns to this day. There is evidence of former

medieval open-field systems across the study area, including distinctive boundary types and earthworks such as ridge and furrow.

5.334 There is generally little physical evidence for medieval industry within the study area, although documentary sources indicate a widespread system of watermills in most parishes, particularly the major river valleys. Excavated medieval mills are rare. Medieval finds are widespead, particularly pottery which was commonly deposited during manuring of fields.

**Post-medieval (1540-1900)**

**Introduction and Chronology**

5.335 For this assessment the earlier post-medieval period has been defined as extending from 1540, after the dissolution of the monasteries, to 1750, at the beginning of the Industrial Revolution. Of course, large changes took place in industrial production, urbanisation and the organisation of the countryside prior to 1750 and the latter date is a conventional point in time when these trends are seen to be accelerating to a higher level of change. The latter part of the period extends to 1900.

5.336 Wiltshire, along with other parts of the South West, saw rapid industrial expansion in the 16th and 17th centuries, associated with the woollen cloth trade, although this trade was punctuated by recessions in the late 16th and mid 17th centuries (Bettey 1986, 121) and finally, collapsed in the 1830s in the face of expansion of the cotton and wool industries in the north of England. Population expansion and wealth from trade resulted in the internal growth of towns from the late 17th and 18th centuries (though rarely their expansion or the foundation of new ones) and the establishment of grand country houses, parks and gardens. The industrial revolution of the mid 18th century and onwards brought further changes, with a second development phase in the earlier 19th century, around 1830 (Whyte 1999, 264). The physical appearance of the county was altered through parliamentary enclosure and agricultural reform, the development of major infrastructure, including turnpike roads, canals and railways, and increased urbanisation.

5.337 There are a wide range of documentary sources for the period, including good cartographic coverage, particularly the tithe maps and Ordnance Survey maps of the 19th century, but also earlier estate maps and enclosure maps. The below-ground archaeological resource is perhaps a smaller element of the resource than extant features, which include standing buildings and landscape features such as evidence for parliamentary enclosure and formal parks and gardens.

***Monument Density***

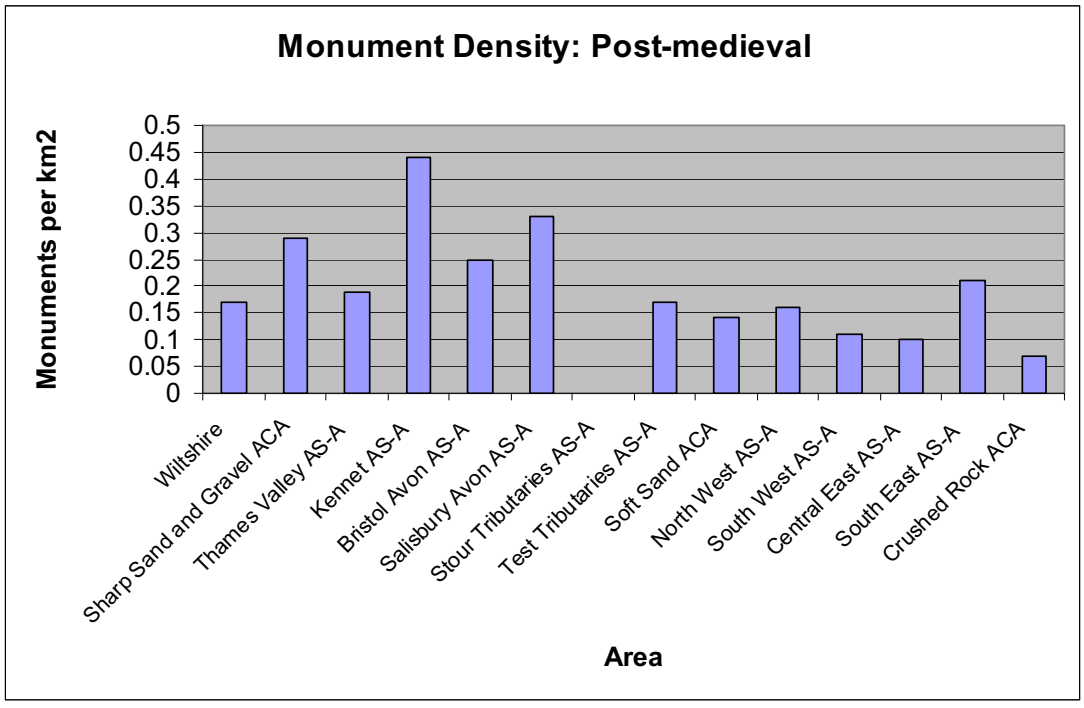
5.338 The density of recorded archaeological sites is notably higher within the Sharp Sand and Gravel ACA than Wiltshire as a whole, 0.29 monuments per $km^2$ compared to 0.17 monuments per $km^2$. Analysis of the Aggregate Sub-Areas shows that sites are focused on the Kennet AS-A (0.44 per $km^2$), the Salisbury Avon AS-A (0.33 per $km^2$) and the Bristol Avon AS-A (0.25 per $km^2$). Given the historically inconsistent nature of recording post-medieval sites on the WHER, this may reflect research bias towards these areas, although it may also reflect a genuine focus of sites of interest, including industrial and settlement sites, or the survival of such sites, in these locations. Densities for the Thames Valley AS-A (0.17 per $km^2$) and the Test AS-A (0.17 per $km^2$) are similar to that for Wiltshire as a whole (0.17 per $km^2$) and no sites are recorded within the Stour Tributaries AS-A (0.00 per $km^2$). Monument densities for the Soft Sand ACA is slightly lower than for Wiltshire as a whole, 0.14 per $km^2$

compared to 0.17 per km$^2$. Within the Soft Sand AS-As, there appears to be some focus on the South-East AS-A, although the reasons for this are unclear. Monument density for the Crushed Rock ACA is low compared to Wiltshire as a whole, 0.07 per km$^2$ compared to 0.17 per km$^2$. This may reflect a more dispersed settlement pattern in this area. Post-medieval sites are recorded on Figs. 27-29.

Table 5.13 Monument Density: Post-medieval

| Area | Number of Records | Density (km$^2$) |
|---|---|---|
| Wiltshire (3485 km$^2$) | 559 | 0.17 |
| Sharp Sand and Gravel ACA (398 km$^2$) | 114 | 0.29 |
| Thames Valley AS-A (78 km$^2$) | 15 | 0.19 |
| Kennet AS-A (43 km$^2$) | 19 | 0.44 |
| Bristol Avon AS-A (83 km$^2$) | 21 | 0.25 |
| Salisbury Avon AS-A (178 km$^2$) | 58 | 0.33 |
| Stour Tributaries AS-A (10 km$^2$) | 0 | 0 |
| Test Tributaries AS-A (6 km$^2$) | 1 | 0.17 |
| Soft Sand ACA (342 km$^2$) | 49 | 0.14 |
| North West AS-A (95 km$^2$) | 15 | 0.16 |
| South West AS-A (160 km$^2$) | 18 | 0.11 |
| Central East AS-A (21 km$^2$) | 2 | 0.10 |
| South East AS-A (66 km$^2$) | 14 | 0.21 |
| Crushed Rock ACA (88 km$^2$) | 6 | 0.07 |

Graph 5.10 Monument Density: Post-medieval




### *Towns*

5.339 The number of towns in the county in this period did not increase compared with the medieval period, when many new urban settlements had come into existence. These towns, as existing urban areas, are outside of the study area. Some medieval towns dwindled into villages in this period (e.g., Lacock, Sherston, Cricklade). Indeed there was, with some exceptions, a general period of urban decline that was stabilised in the early 17th century, but only reversed in the 18th century. This

reflected the nationwide economic difficulties, weakness in trade and inflation of the later 16th century and a similar national recovery.

5.340 The major support of nearly all the towns in the earlier part of the period was the cloth trade, and towns continued to rely on some aspect of the textile industry into the 19th century. Sheep pasture on upland areas (such as the Crushed Rock AS-A) would have supplied the wool trade. Lowland areas, including the river valleys of the study area, were characterised by arable agriculture within field enclosures which had developed both through piecemeal expansion and Act of Parliament from the medieval period. The interrelationship of town and country was an essential element of the economy throughout the post-medieval period. Diversification away from the dominant trade was also important, and all towns had a generalised market function for their hinterland. Warminster was particularly successful due to its important corn market, though this declined after 1830, and its maltings, brickmaking and gloving (Warminster EUS 2004). Trowbridge was an important clay tobacco pipe manufactory (Trowbridge EUS 2004). Salisbury, although the county city, saw less urban expansion in this period (Salisbury EUS 2004). Thus urban growth was restricted mostly to the period after 1800 and what growth there was seems to have been accommodated by infill and increasing density.

5.341 The distribution of towns in the county is not even. Most significant towns were in the north-west and west of the county, along the Bristol Avon or in easy reach. Marlborough served most of the north-east of the county and Salisbury the south-east. Only Lacock, which really ceases to be a town in this period, is officially in an ACA, although all except Devizes are actually in river valleys.

***Rural settlement and Landscape***

5.342 Historic Landscape Characterisation has not been carried out for the whole of the county of Wiltshire. Therefore, broader landscape studies have been referenced in this discussion where useful. Wiltshire lies across the boundary of the central and south-eastern “provinces” and mainly into two of the “settlement sub-provinces” of Roberts and Wrathmell (2000, 39-57; 2002, fig. 1.4). The relationship between the provinces proposed by Roberts and Wrathmall and the study area is illustrated on Fig. 30. The Cotswold Scarp and Vale unit (CCTSV) broadly correlates to the Crushed Rock ACA, the Thames Valley AS-A, the Bristol Avon AS-A and the North West AS-A. The East Wessex sub province (EWEXE) covers the greatest part of the study area, and is roughly equivalent to the Kennet AS-A, Salisbury Avon AS-A, the Test Tributaries AS-A, and the South-East AS-A. The smallest sub province within the study area is the West Wessex unit (CWEXW) and approximates to the South-West AS-A and Stour Tributaries AS-A.

5.343 The rural settlement framework for the early part of the period grew organically from the medieval settlement pattern. Open fields predominated in the central, eastern and northern parts of the study area (on the EWEXE and CCTSV, Fig. 30). Informal enclosure (i.e. not by Act of Parliament) is documented from the 1630s, and this seems to have been the more common procedure for enclosure in the northern and western parts of the study area (particularly the Thames Valley AS-A, Crushed Rock AS-A and Bristol Avon AS-A). Parliamentary enclosure is dominant in the southern and eastern parts of the study area, including the Salisbury Avon AS-A and South-East AS-A, concentrating in the years 1770 to 1840 (Roberts and Wrathmell 2002, fig. 5.1).

5.344 Enclosure, where it occurred, especially the parliamentary kind, encouraged the movement of farms from villages to the enclosed land (*ibid*, fig. 5.1). In the late 18th

century, settlement in the eastern and southern areas of the county was focused on the river valleys, including the Salisbury Avon AS-A and the Kennet AS-A. Here it appears to have been mainly linear along the valleys, focused at the junction between the valley side and the flood plain (Lewis 1994, 174-176). Farms here would be best placed for access to the varied terrain these areas offered. In contrast, the distribution of settlement across the northern and western areas of the county was more uniform, comprising both nucleated and dispersed patterns (*ibid*).

5.345 As discussed above, enclosure across the study area involved both informal piecemeal enclosure and formal Enclosure by Act of Parliament. The Hedgerows Regulations of 1997 provide criteria under 'Archaeology and History' for the Statutory protection of significant hedgerows which fall within these criteria. This includes reference on documents pre-dating the Enclosure Act for the parish and those hedgerows marking parish boundaries. Depiction on a document of 1845 or earlier may also be generally taken as a bench mark date for the consideration of hedgerows as historically 'Important' by Local Authorities, and is one of those proposed as a cut off point in the review of the Regulations published in 1998.

*Farms and farm buildings*

5.346 The types and distribution of farms and farmbuildings should reflect the subdivisions described above. This is most clear in the case of aisled barns (for threshing and storing grain) which occur almost exclusively in the corn lands (EWEXE) of the the Salisbury Avon AS-A, Kennet AS-A, Central East AS-A and South East AS-A. Field barns related to livestock are most often found in the chalklands, such as the Crushed Rock ACA, reflecting needs for additional facilities some distance from the farm (Slocombe 1989a, 22-23). Materials also reflect geology: brick and timber being more common in the south-east; stone in the north-west (Slocombe 1989a).

5.347 Farm buildings in this period are therefore important indicators of agricultural activity, and their elaboration and size will indicate economic activity. As a result many of these structures are designated as Listed Buildings. Farm houses vary in size and character and many older examples are no longer part of a farm, either because the farm moved from an original village site, or more recent changes in farming practice. Rarer survivals are earlier farm worker's cottages. Where they do survive they have often been greatly changed for modern use.

5.348 A specific kind of farm, linked to a particular economic episode is the model farm (see Fig. 27). These grew out of the scientific and technological ideas of the agricultural revolution of the later 18th century but flourished in the era of High Farming, 1830-1870. Such farms are usually laid out to a theoretically efficient plan with specific functions envisaged and designed for. Seven model farms (all called Home Farm) are listed in the ACAs, one on the Soft Sand, four in the Salisbury Avon Sharp Sand and Gravel ACA and one on the Bristol Avon Sharp Sand and Gravel ACA (WHER ST96NE528, ST84SE532, ST85NW527, SU02NW531, SU12NE534, SU21NW526, ST98NW533).

*Deserted settlement*

5.349 Although deserted settlement is most strongly associated with the medieval period, the process also occured in the post-medieval period. One example is recorded within the study area at Wilton Park (AMIE 214606), resulting from emparkment. Generally there is a very strong spatial correlation between post-medieval desertion and parliamentary enclosure. However, the date of desertion in most of these cases is rarely known and no specific case can be tied to enclosure without further investigation. Deserted settlements often began their decline in the late medieval

period, but in many cases they were not finally deserted until the 16th/17th centuries.

*Ridge and furrow*

5.350 Post-medieval ridge and furrow is usually thought to be recognisable as narrow rigg, i.e. strips averaging about 5m wide and not very well-developed, owing to their short life while the Napoleonic Wars (1796-1815) and their aftermath kept corn prices high. They are usually found on the chalk downland (Crushed Rock ACA; Taylor, 143, 146-8). These earthworks would not usually survive any later agricultural activity in the valleys, but expansion on to the marginal downlands seems the most likely explanation for their distribution. As in the medieval period, distribution of post-medieval ridge and furrow is not comprehensively incorporated into the WHER, and is not illustrated on the post-medieval figures. It should also be noted here that ridge and furrow of the classic reverse S kind actually formed during the lifetime of the open fields, and so if the field enclosure took place on the post-medieval period (for example Parliamentary enclosure in the 18$^{th}$ century), strictly speaking the ridgeand furrow is of this date. However, it is current practice to discuss these in a medieval context.

*Watermeadows*

5.351 Watermeadows were developed in the early post-medieval period (Fig. 28). They provided early feed for sheep and a later hay crop. A possible third cut for cattle in the late summer/autumn has been claimed (Bettey 1986, 135), but the value of a later hay crop is disputed by Bowie (1987, 158). Watermeadows have been dated to the early 17th century at Dinton in the Nadder valley (Salisbury Avon AS-A; WHER SU28NW526) and also at Preshute (WHER ST85NW525) and the 17th century is thought to be the general period for the creation of watermeadows to encourage better feed-crops. Bowie claims that all the south flowing downland rivers in Hampshire had been used for watermeadows by 1686 (*ibid*, 154). While the dates for Wiltshire are not clear, Bowie states that the situation by the later 18th century at the latest was probably no different (*ibid* 155).The distribution of these in the Salisbury Avon AS-A and in the Thames Valley AS-A reflects the development of sheep farming in the adjacent downland, and no system has been noted in the Bristol Avon valley, where cattle farming was predominant and indeed the soil conditions were not conducive to the best results from this form of irrigation (*ibid*, 151-152).

5.352 Watermeadows require much maintenance and careful operation. This was often communal and required careful co-operative management. They were, nonetheless, maintained throughout this period and are important evidence for communal action as well as land use. The main cause of their eventual disuse was probably the introduction of root crop rotation which led to the availability of feedstuffs without the maintenance workload of watermeadow maintenance and they fell out of use gradually during the second half of the 19th century (Bowie 1987, 158). They survive in the landscape today as leats, canals, low banks, sites of sluices and other water management features on the river floodplains (e.g. Woodford, Taylor 1987, fig. VII)

***Almshouses and Workhouses***

5.353 Few medieval almshouses survive but they are a significant feature of the Post-medieval period. Only the Lady Margaret Hungerford Almshouses at Corsham fall into the ACAs (North West Crushed Stone). They were founded in 1668. Most were founded in towns so that Trowbridge had the Yerbury Widows Almshouses founded

in 1698 but rebuilt in 1907. Others in Trowbridge, Warminster and Salisbury are quite late, founded in 1861, 1873 and 1863 respectively.

5.354 The Poor Law of 1834 led to the creation of Poor Law Unions and the erection of Workhouses in the following years. There were 18 Unions by the end of the 19th century, each with a Workhouse. The buildings were generally on the edges of the towns, but served the parishes around that were in the Union. Many workhouses have been demolished, others commonly converted into hospitals, and others into housing or offices. Neither almshouses nor workhouses are noted in the Wilts HER, but a national study is available in Morrison 1999.

***Great Houses, Parks and Gardens***

5.355 The dissolution of the monasteries, and the associated redistribution of land, greatly increased the number of landed elite (Bettey 1986, 168). Wealthy gentry, including those who had made fortunes from the cloth industry, constructed grand houses with associated parks and gardens (Bettey 1986, 121; Fig. 27).

5.356 Defence had ceased to become an essential element of a country seat by the late 15th and early 16th century and defensive features became merely status symbols. Great houses were built entirely for comfort and show from early Tudor times onward, although several found themselves brought into unexpected defensive use in the Civil War. The slighting of defence works after the Civil War and the relative security that followed gave added impetus to the abandonment of moated sites in the 17th and 18th centuries and their replacement by the country house (Wilson 1985, 55). The Dissolution of the Monasteries of course provided wealth and sites for such houses. Some such as Lacock, were converted into family homes, others demolished and houses built anew in the latest fashion (Wilton, Longleat, Amesbury). Other seats were merely the continuation in use of medieval houses, rebuilt or modified as fashion and finance allowed, such as Longford or Wardour (the latter rebuilt on a new, but nearby site). Others were built on new sites for aesthetic or fashion reasons, such as Stourhead (from Stourton Manor).

5.357 Littlecote House is of significance as the first important use of brick in the county (1580-1590 – Pevsner 1985, 36). Lacock, Wilton and Longleat are important as early examples of Renaissance influence in the mid 16th century, the last of national significance and influence. Wilton is outstanding as a leader in architectural fashion in the mid 17th century. Wilbury (Amesbury) and Stourhead (Stourton) were leading and nationally important examples of the Palladian revival in the early 18th century, with Bowood and Wardour important examples of later 18th century design.

5.358 Great houses functioned as the centre of an estate and the immediate environs in the early period would be laid out as gardens. Parks might be laid out adjacent to a house but were just as likely to be remote from it. In the earlier period parks were for hunting, but later came to be landscaped in various ways, culminating in the great landscape parks of the later 18th century, sweeping right up to the house, which became a feature in the landscape design (Wilton (WHER ST97SE525), Bowood (WHER SU02NW525), Stourhead (WHER ST96NW530). The more elaborate and intricate geometric designs of the 16th to early 18th century do not survive, although some have been restored. The framework of beds, parterres, drives and waterworks can survive as relict features either visible in the later layout or to be excavated (West Dean, WHER ST96NW528). Some built elements of early designs can be moved or incorporated in the later changes, as with the 17th-century grotto at Wilton (WHER ST97SE525). Changes in fashion in the 19th century led to the reintroduction of gardens, sometimes elaborate and geometrical (Heale House,

WHER ST96NW527, Wilton, WHER ST97SE525 and, just into the modern period but part of this fashion, Iford Manor, WHER ST85NW525). Associated features which often survive the destruction of parks and gardens include lodges, grottos, icehouses, lodges and follies (AMIE 1062909).

5.359 Stourhead and Bowood are nationally important examples of two schools of landscape design, of the early to mid and mid to later 18th century. The great 17th-century gardens at Wilton were replaced by the Kentian parkland underlying the present layout in the 1730s. This has been modified by 19th-century works, including a formal garden, but is still an important park.

5.360 These parks and gardens have left a large mark on the present day landscape and are important evidence of wealth, its use and its distribution in the post-medieval period. They provide an important economic and social benefit today. At the time however, such change could be divisive and not of immediate benefit to all.

5.361 The great houses were at a level above the ordinary manor and gentry houses, most of which would have functioned as farms/smaller estate centres at least in the earlier part of the period, but many of these either ceased to be functioning farms and were upgraded, or fell down the status ladder as new non-farming houses were built. Clothiers' houses, often on the edge of towns or near the mill sites, are a major category of non-agricultural large house in the county. Pevsner identifies a particular late 16th-century Wiltshire type with "…completely flat fronts with symmetrical fenestration and gables like saw-teeth…as a rule built for rich clothiers…" of which Stockton Park (WHER ST93NE528) is an example. Compared with the Great Houses, these are essentially vernacular. Nearly all of the houses of the earlier part of the period will be Listed, and many of the later ones.

***Religious buildings/Burial***

5.362 By 1540 the dissolution of the monasteries was complete. Chantries were dissolved in 1547 (Bettey 1986, 164). Land was redistributed and many religious buildings were destroyed. The system of parish churches remained, although there were major changes to their interiors in the mid 16th century (Bettey 1986, 163-4). Few churches were built or rebuilt in the early part of this period, although in the 19th century many were "restored" and new churches were constructed for the growing population and as a result of the increasing interest in liturgy. Nonconformism was also a major impetus for the building of chapels, particularly in the later part of the period. The south-west of England, especially Somerset and West Wiltshire, was an area where Nonconformism was strong and a large influence on society and worship.

5.363 The only new church in the early part of the period was at Easton Royal in the Vale of Pewsey, built in traditional style in 1591 (Pevsner 1985, 38). Several churches were rebuilt in Gothic style in the 17th century, including the church at Trafalgar House in 1677 (WHER SU03NE525). Classical details are used in several churches in the middle third of the 17th century and the totally rebuilt church at Farley of 1690 (Salisbury Avon ACA), is so Wren-like that Pevsner suggests his actual input (1985, 243). 18th-century ecclesiastical work is rare, generally, in Wiltshire and nothing in Georgian style was erected in the ACAs. At Stratford-sub-Castle, however, the church tower is a Gothic Survival design of 1711, evidence of extreme architectural conservatism in this sector.

5.364 An early example of a Nonconformist chapel, indeed the earliest surviving in the country, is at Horningsham (WHER ST92NE526), near Longleat, on the Soft Sand ACA, dating from 1566-67. At Corsham, on the crushed rock ACA is a 17th-century

chapel and at Bradford, a Presbyterian chapel of 1698 (all Pevsner 1985, 45). The distribution reflects the strong Nonconformism in Somerset and West Wiltshire, even though the Horningsham chapel was supposedly built for Scottish workers at Longleat (*ibid*). Other Nonconformist chapels occur in the county, of later 18th to early 19th-century date, including a Friends' Meeting House and a Baptist Chapel at Melksham, of 1734 and 1776, respectively (Pevsner 1985, 343). The great majority of nonconformist chapels date to the period 1790-1870, however. A full list of Non-conformist chapels in the South West of England has been produced by RCHM(E).

5.365 Cemeteries and associated memorials are obvious sources of information about societal attitudes to death and status, as well as individual lives and conditions. It was in this period that the established church lost its monopoly of burial grounds. Non-conformist and then private and municipal cemeteries came into existence, the latter after the various Sanitation and Burial Acts in the 1840s and 50s. Only four Nonconformist burial grounds are noted for the ACAs in the HER: Quaker burial grounds at Bromham and Biddeston (42000, 41589); a Baptist one at Chapmanslade (964) and the Free Congregational Horningsham Chapel (965).

5.366 Memorials are an obvious source of epigraphic and artistic evidence, and the layout of burials in older cemeteries may be of interest. The actual interments are rarely disturbed, and then usually reburied. Scientific study is rare and large samples extremely rare. None have been sampled from this period in the study area, although limited work has been done at Bathford and Bathampton, just over the border in Somerset. Burials of this period are far more often removed, if necessary, by specialist, non-archaeological contractors, for immediate reburial.

***Industry and transport***

5.367 Assessment of the industrial heritage of the Wiltshire aggregates areas has been severely limited by the incomplete nature of the coverage of this period in the HER and the lack of detailed Listed Building information in accessible form, which might otherwise go some way towards remedying the gaps in data. The South West Archaeological Research Framework (Webster, 2008, 241) suggests that English Heritage's Monument Protection Programme Industry Studies may contain information on these areas.

5.368 The woollen cloth industry, which had developed in the region during the high medieval period, remained important into the post-medieval period. In Wiltshire production was focused on the western area of the county, at centres such as Bradford-on-Avon, Trowbridge and Warminster (Bettey 1986, 137). Of the early period little direct evidence survives, but The Hall, a magnificent house of 1610, was built near the centre of town by John Hall a wealthy clothier and stands as a particularly grand example of a clothier's house.

5.369 In the earlier part of the period mills were used for fulling and sometimes other pre-spinning processes, but much of the other work, especially weaving, was done by home-workers controlled by the clothiers. Fifteen mills in the ACAs are listed in the WHER, and are, rather obviously, concentrated in the prominent river valleys, particularly the Bristol Avon AS-A. Most would have begun as grist and/or fulling mills. Of these, six were described as fulling mills in the 19th century. Of these two were attested from the late 18th and early 19th centuries and one (Five Lanes Mill, Potterne – WHER SU04SE531) was first noted in 1656. The earliest mentioned is Littleton Wood Mill (WHER ST96SW616) of 16th-century date. It is obvious that there must have been more, but the quantity and the degree of survival cannot now be assessed on the basis of the HER data. However, all later post-medieval water

mills should be assumed to occupy the site of earlier mills, until shown otherwise. Large mills, water-powered and then steam-driven grew as the processes for preparation, spinning and finally weaving cloth became more and more mechanised and powered. An example would be Lady Down mill at Trowbridge. In 1828 it was a fulling mill with 8 pairs of stocks, 4 driven by water, 4 by steam. Littleton Wood Mill was attacked by cloth workers in 1803 in an attempt to stop the introduction of powered gigmills and shearing frames. Dilton Lower Mill (WHER ST84NE717) was a water-powered spinning mill in 1823. As with medieval mill sites, it is important to view mills as part of a wider landscape, and evidence for leats may be present where there is currently no evidence for a mill itself.

5.370 Mills, especially in the earlier period were often dual purpose, especially water mills. Windmills were only ever for grinding corn.

5.371 Another category of industrial plant is that of maltings and other brewing infrastructure. Brewing was a domestic industry and paraphernalia could be found in all farms and large houses in the early post-medieval period (eg. Lacock, where the important 16th-century-origin brewhouse is in the abbey). Only one rural brewery is otherwise noted in the HER in the ACAs, but many should still survive in traditional farm and estate buildings. Later, more industrial scale malting and brewing tended to be situated in the towns, but one was built at Lacock in the 19th century, now converted into cottages.

5.372 Quarrying was clearly in existence in the earlier part of the period, but its organization prior to the 19th century is not clear. It became a clearly recognisable industry during the 19th century. Box and Corsham were at their peak in this century, having been overshadowed by the Bath quarries in the 18th century. Chilmark declined in the mid 19th century but was revived later in the century. All these sites were purchased by the government in the 1930s for secure storage. Quarrying for gravel on a large, mechanised scale on the flood plain is a modern activity, but quarries for gravel were typically dug on a small scale by hand for most of this period. Chalk and limestone were quarried for lime kilns. The production tends to be on a small scale and closely related to lime-burning sites. The lack of entries on the HER for quarries or lime pits or kilns makes further comment difficult.

5.373 The same lack of information prevents an assessment of the tile and brick industry and clay extraction, although 17th-century brick kilns have been noted at Clarendon Park in the Salisbury Avon AS-A and at Crockerton in the South West AS-A. Both supported a 19th-century brick works. Like most local brickworks they were overcome during the late 19th century by the competition from the new technology of the dry-pressed bricks centred on Bedfordshire and the London Brick Company.

5.374 It is probably true to say that extractive industries in the early part of the period were essentially *ad hoc*, as required, project by project. Apart from chalk extraction, they will evidently occur in the majority of the ACAs, for simple geological reasons.

5.375 A completely new industry in the latter part of the period was the production of town gas. Each town and some large villages will have acquired gasworks during the 19th century, but only Tisbury gas works (now demolished) figures on the HER (WHER ST92NW536) in the Salisbury Avon AS-A.

5.376 Electricity generation began in the later 19th century, but no examples are noted in the HER or NMR records in the ACAs. Both kinds of sites present great obstacles to excavation as they are usually heavily contaminated, but any standing building remains of earlier periods will be of significance.

*Turnpike roads*

5.377 Road maintenance in the early part of this period was predominantly the responsibility of the parish through which a highway passed. This system was palpably failing for a variety of reasons by the 17th century. The situation was addressed from the early 18th century by the passing of Turnpike Acts, allowing companies to be formed to charge tolls (and hold the monopoly) for the construction and maintenance of good roads. Significant national trunk roads crossing the county were obvious and lucrative candidates for turnpiking. One effect of turnpiking was the privileging of one route of several traditional ones, for those willing to pay for its use. The present A4 from Marlborough to Bath (and Bristol) is merely the route chosen by the turnpiking company out of several older coaching routes, one, for example through Melksham. Thus, the modern, non-motorway network of trunk roads across the country largely owe their present alignments to the turnpikes, and this is no less true for Wiltshire. Turnpike companies tended to run relatively short lengths of what we would recognise as trunk routes. These different sections would often have distinctive paraphernalia such as mile posts, sign posts, toll houses and, less immediately visible today, different approaches to road engineering. Embankments, cuttings and bridges were also created to ease gradients, and where suitable local quarries for road material were also opened. These engineering monuments are both visible in the present day landscape and very vulnerable to road improvements to the modern carriageway. The viaduct at Limpley Stoke is an outstanding monument of the turnpike era, designed by G. Manners of Bath in 1834, and indeed scheduled. Other works are often less noticed and more at risk.

5.378 Another very pronounced impact of the turnpikes was the growth of coaching inns (in number, size and specialization) providing refreshment, horses and accommodation. Most were in towns but several were founded along the highway as required. Many survive but lost their coaching function rapidly as the turnpikes were superseded by the railways (1840-1880).

5.379 Turnpikes *per se* are not listed in the HER or the NMR/Listed building registers so their importance in the ACAs cannot be assessed. Some tollbooth/houses are listed or occur unsystematically in the HER. However, much work has been carried out on them by researchers and specialist societies (e.g. turnpikes.org.uk). From these it has been calculated that there were 44 Wiltshire Trusts set up between 1706 (Avebury to Devizes) and 1819 (Marlborough to Liddington) which built 494 miles of turnpike with an average length of merely 11.22 miles. Three or four were over 50 miles in length and the median was between 15-30miles. 1706 is the earliest date of a turnpike act in England, and the last trust in Wiltshire was taken into public ownership in 1875. Turnpikes functioned alongside canals, their distinctive offering being speed. They were, therefore, largely killed off by the spread of the even faster railway. Their revival as major routes belongs to the modern period and the motor car. Apart from the present A4 which follows the Kennet Valley, turnpikes tended to keep to higher ground, largely avoiding the valleys which are the major element of the ACAs.

*Canals*

5.380 In the late post-medieval period a system of river navigations and canals were used to transport goods. The main phase of canal building was in the late 18th and early 19th century, and their heyday was short lived as they were superseded by the railways in the earlier 19th century (see below). Within Wiltshire, and crossing the ACAs, these include the Thames and Severn Canal (AMIE 970386) (linking with the River Thames Navigation (AMIE 1341177)), at the northern edge of the county, authorised 1783, and the Kennet and Avon Canal (AMIE 867813), which cuts east/west through the central area of the county, authorised between 1794 and

1813. The Wiltshire and Berkshire Canal, constructed 1810, enters the county to the east of Swindon, and runs south-west to join the Kennet and Avon Canal south of Melksham, with branches leading to Chippenham and Calne. The North Wiltshire Canal (AMIE 972271), constructed in 1814, linked the Thames and Severn Canal with the Wiltshire and Berkshire Canal at Swindon. At the southern edge of Wiltshire, the Salisbury and Southampton Canal (AMIE 1041415) was intended to join Salisbury with Southampton but only reaching as far as Alderbury Common, east of the Salisbury Avon Navigation (AMIE 1031488). Associated canal features include watchman's cottages (AMIE 1176832), wharfs and locks. The latter include the Caen Hill Locks, in the North West AS-A, which are a sequence of twenty-nine locks over two miles (AMIE 1011228).

5.381 While the canals are important heritage assets, restoration, for example on the Kennet and Avon, has resulted in the loss of much historic fabric to the need for practical functioning. Bridges have been removed, canal beds replaced and locks (necessarily) rebuilt and refurbished.

*Railways*

5.382 Railways were developed in the earlier 19th century and lines were laid through the county from the late 1830s. The Great Western Railway (AMIE 1359288) was completed in 1841 and joined London with the South West. It crosses north-east/south-west through the northern part of Wiltshire, via Swindon. However, it was the south of the county where railways were first extensively built, from 1847 to 1862 seeing an extensive network of lines linking the main towns. The north was not linked into the system (except for the line to Gloucester) until the 1870s. The last main line was built in 1903.

5.383 The mid and later 19th century, therefore, saw the establishment of a network of railways across the county, illustrated on Fig. 29. Associated features include stations, halts, tunnels, cuttings, workshops, coal yards, sidings, water towers, signal boxes, track beds, bridges, diverted roads, construction sites, new towns (Swindon), as well as less direct effects such as pub and street names, and tourism. It also had an impact on milk production in farms, making a milk, as opposed to a cheese and butter, trade possible. Watercress was another crop whose cultivation was made possible by rapid rail transport. Towns connected to the railway flourished: towns which were not (few indeed in Wiltshire), stagnated.

5.384 The network peaked in the decade before the First World War and largely survived until the cuts made to loss-making lines in the 1960s.

5.385 Railways tended to follow river valleys where possible, to ease gradients and so on. Consequently their distribution broadly mirrors that of the major river valleys, especially in the Salisbury Avon AS-A and Bristol Avon AS-A. Routes often still survive and are often still in use as footpaths or cycleways. Some, however, have been built over.

### *The Civil War*

5.386 The Civil War in Wiltshire was marked by sieges and manoeuvre, with only two substantial battles, Roundway Down, near Devizes and Aldbourne, near Marlborough, both in 1643. In the early part of the conflict the county was largely under the control of parliament with small garrisons established in most of the towns. In late 1642 and 1643 the advantage swung to the King's party, with the capture of Marlborough, Malmesbury, Devizes, and Salisbury. The parliamentarian garrison at

Wardour Castle, however, withstood a three-month siege until it was finally starved into surrender in March 1644.

5.387 From late 1644 Parliament started to gain the upper hand with the capture of Malmesbury, and Chippenham in the vicinity of the Bristol Avon AS-A. However, garrisoned towns and strongholds changed hands frequently, for example, Chippenham, Devizes and Salisbury, which saw bitter hand-to-hand fighting in December 1644. Other garrisons were set up in country houses such as Chavenage House, Lacock Abbey, Chalfield House and Littlecote House with additional strength provided by surrounding earthworks.

5.388 The final phase of the war in the west commenced with the arrival of parliament's new professional army (the New Model) in June 1645 under its commander, Sir Thomas Fairfax. This systematically returned the west into parliament's hands, the royalists finally submitting in 1646 (Wroughton 2010)

5.389 "*in Wiltshire…there were few villages without some scars of war*" (Bettey 1986, 185). Towns and villages which had been under siege or attack suffered heavy damage, such as Salisbury, and defensible sites had the defences slighted, for example, Old Wardour Castle, Devizes, and across the border in Somerset, Farleigh Hungerford Castle.

5.390 The main archaeological trace however, will be the artefact scatters that can be found on battlefields, and which are vulnerable to unorganized finds collection or metal-detecting, and the earthwork siege defences. The latter exist at Old Wardour Castle and may still exist under Devizes. Most urban defences were flattened after the war and are mostly built over. None are known or expected in the ACAs. The two battle sites are outside the ACAs but sites of minor skirmishes may have left artefact traces, and these could well be on river crossings in valleys.

***Conclusion***

5.391 Remains from this period are widespread and well-preserved within the study area, with many more surviving types of evidence than preceding periods. This includes elements of the infrastructure, such as canals, railways and turnpikes, which are still in use today as well as a vast number buildings.

5.392 Both rural settlements and towns saw sustained expansion through the post-medieval period, but it is important to note that the former, as urban areas, are outside the study area. This growth largely represented a development of the settlement pattern established in the medieval period. The majority of farmsteads and agricultural outbuildings within the study area date to this period and survive well within the ACAs. The post-medieval period saw the widespread enclosure of field systems across the ACAs, and agricultural remains include watermeadows, focused particularly in the Salisbury Avon AS-A, and ridge and furrow earthworks. Other landscape features include Great Houses and Parks and Gardens which were developed in this period. The period also saw industrial expansion, including evidence for the widespread development of watermills, particularly in the north-west of the study area.

### Modern 1900-2000

#### Introduction and Chronology

5.393 The period from 1900 is one of great change and great destruction of past heritage and its positive contribution is not well documented. Indeed it is only relatively recently that the remains from the period 1900 to the present have been considered heritage assets at all. This has had an effect on the entries in the HER which are far from complete, or, more realistically, representative or consistent.

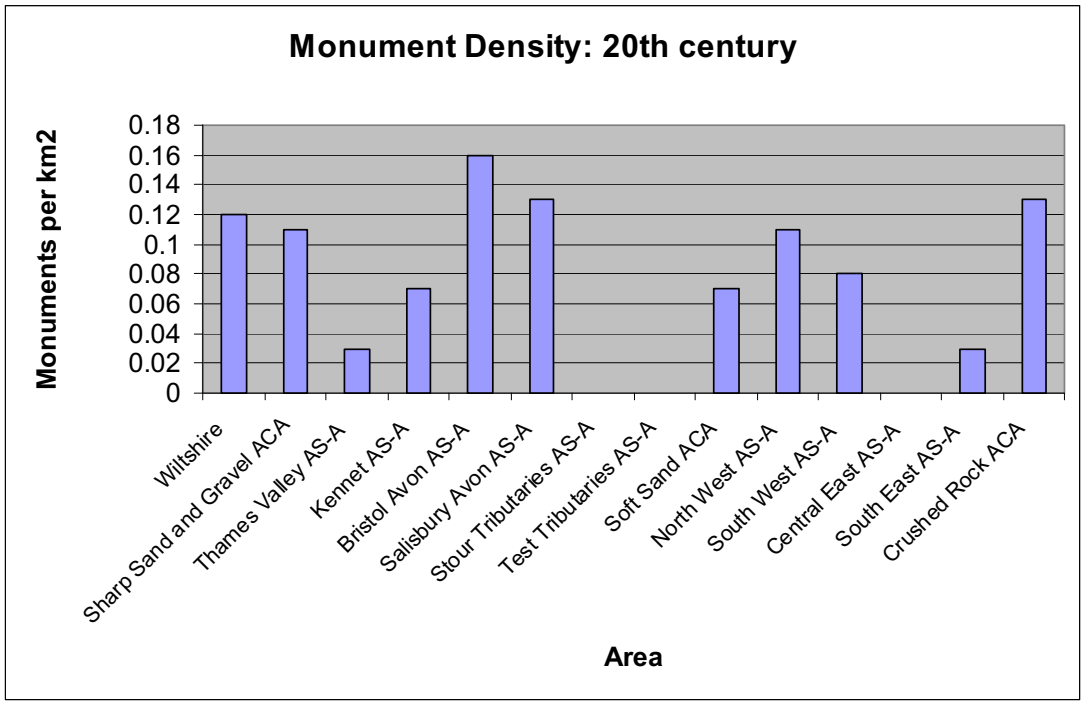
#### *Monument Density*

5.394 Given the small number of entries for this period, the similarity in density of the Sharp Sand and Gravel and Crushed Rock ACAs to the overall Wiltshire figure is surprising. Only just under a fifth of the HER entries are found on the ACAs and this is strongly skewed to the Salisbury and Bristol Avons AS-As and the Crushed Rock ACAs. It may well be that this is because these are the most populated areas in the modern period, but may also reveal a bias in recording which cannot be checked here. Modern sites are recorded on Fig. 31.

Table 5.14 Monument Density: 20th Century

| Area | Number of Records | Density ($km^2$) |
|---|---|---|
| Wiltshire (3485 $km^2$) | 414 | 0.12 |
| Sharp Sand and Gravel ACA (398 $km^2$) | 42 | 0.11 |
| Thames Valley AS-A (78 $km^2$) | 2 | 0.03 |
| Kennet AS-A (43 $km^2$) | 3 | 0.07 |
| Bristol Avon AS-A (83 $km^2$) | 13 | 0.16 |
| Salisbury Avon AS-A (178 $km^2$) | 24 | 0.13 |
| Stour Tributaries AS-A (10 $km^2$) | 0 | 0.00 |
| Test Tributaries AS-A (6 $km^2$) | 0 | 0.00 |
| Soft Sand ACA (342 $km^2$) | 25 | 0.07 |
| North West AS-A (95 $km^2$) | 10 | 0.11 |
| South West AS-A (160 $km^2$) | 13 | 0.08 |
| Central East AS-A (21 $km^2$) | 0 | 0.00 |
| South East AS-A (66 $km^2$) | 2 | 0.03 |
| Crushed Rock ACA (88 $km^2$) | 11 | 0.13 |

Graph 5.11 Monument Density: 20th Century




***Towns***

5.395 While not strictly part of the areas to be assessed, towns and their growth are the most significant element in the physical changes to the heritage in this period. Redevelopment, and more significantly in the present context, suburban growth have had major both impacts on the towns themselves and what was until recently their rural hinterland. Villages have also grown. The urban changes are best chronicled in the series of Extended Urban Surveys carried out in Wiltshire. The most extreme example is, of course, New Swindon, a town entirely created by the railways in the previous period but one which has grown enormously in this period, first on the back of the railway support industry, and then on light and service industries consequent on its position on its favourable position on national routes, especially those to London, and has finally become an administrative district in its own right.

5.396 This growth was the result of the continuation of the inward migration of population of the previous period and the concentration of industry and commerce in the town. The countryside became ever more rural and relatively depopulated.

***Rural settlement***

5.397 No 20th-century farmsteads or agricultural settlements are noted on the HER, although smallholding settlements from the interwar years might be expected. Farms and farm buildings changed little in the first half of the period but major changes in farming practice and landholding has led to many changes. Villages have become predominantly dormitory sites with much-reduced agricultural functions; farms have become fewer in number with conversion and abandonment of unneeded farm houses and buildings being common. Large steel cattlesheds, hay barns and silage towers are a more familiar part of the landscape, and a far larger proportion of the land is now arable.

### *Great Houses, Historic Parks and Gardens*

5.398 The county contains a number of gardens of distinction, mostly belonging to the early part of this period. Iford Manor (AMIE 15488), in the Bristol Avon AS-A. is an example of the development of the earlier Italian revival style in this period. Oare (WHER SU16SE525), in the upper reaches of the Salisbury Avon AS-A, is a good example of a revival of a more traditional English 17th-century style by Clough Williams-Ellis. The Courts (Holt, AMIE 618990) and Lake House (AMIE 619077) also essentially belong to this earlier period. Hartham Park (WHER ST87SE531), in the Crushed Rock ACA, shares its designer, Harold Peto, with Iford, and Heale House (AMIE 619077) in the Salisbury Avon AS-A. Shute House (WHER ST92SW529), in the South West AS-A, is a work of the distinguished modern garden designer, Sir Geoffrey Jellicoe, dating from 1970-1990. Reddish House (WHER SU02NW530), in the Salisbury Avon AS-A, owes its interest as much to its owner/designer, Cecil Beaton, as to its intrinsic value. No substantial country houses built or extensively modified in this period are picked up in the HER, and none are noted by Pevsner (but this 1971 edition is in dire need of updating). However, Wilsford House is an essay in 17th century revival style by Detmar Blow (1904-6, AMIE 969966).

### *Industry and transport*

5.399 Industry has expanded and shrunk in this period. Many cloth mills continued to grow and be redeveloped into the later 20th century but none at an industrial scale survived the end of the century. Some have been demolished and others converted for other uses. The same may be said about maltings and breweries, few of which have survived the growth of the big brewery conglomerates. None are listed in the HER or NMR.

*Roads*

5.400 No modern roads are listed in the HER or NMR but the rise in importance of roads at the expense of other forms of transport has led to a range of new and re-engineered roads, of interest both in themselves, as having an impact on the land they pass over and through, and creating a major demand for aggregates. The M4 and improvements to the A303 have both provided major impetus to development in the later part of the century. Minor and less important roads have changed from the “old white road” commonplace of early 20th-century writers to the ubiquitous “two (or three) lane blacktop” in this period.

*Canals*

5.401 No new canals were built in this period, and indeed nearly all completed the decline that began with the coming of the railways. Commercial traffic had effectively ceased by mid century. Most were impassable by the 1960s. A phenomenon of the later modern period, however, has been their restoration for leisure (and limited commercial) use. However, only the Kennet and Avon (AMIE 867813) is completely restored, and the Thames and Severn (AMIE 970386) is currently undergoing restoration.

*5.402* The remains of abandoned canals, however, and particularly the associated buildings and infrastructure, is of archaeological interest, and much of this will date from the early part of the period, as maintenance, repair and improvement continued.

*Railways*

5.403 The railway network continued to expand in the first decade of the period, with the new military line from Ludgershall to Tidworth opened to the public in 1902 (closed

1955). The alternative direct main line from Swindon to Cardiff was opened in 1903, allowing the bypassing of Chippenham, Bath and Bristol on Brunel's earlier southern route. Otherwise, the 20th century was a period of decline in the rail network, especially after the 1962 Beeching Report, which recommended the closure of less well-used lines, especially branch lines, but also several relatively major lines such as the Midland and South Western Junction Railway (AMIE 971169, Andover to Gloucester via Swindon) was also closed. The buildings and other related parts of the physical infrastructure of the railways continued to be renewed and altered in this period, so that remains may well be heritage assets (Stations opened in 1903 and 1906 at Little Somerford and Bulford Camp respectively – AMIE 499606 and 502630). The Tidworth line mentioned above was a military line later opened to public use. Another purely military line was the Larkhill Military Railway opened in the First World War and closed by 1928 (AMIE 915307).

***Military Monuments***

5.404 A very large proportion of the records on the HER and NMR relate to military monuments. This is for two related reasons: the county has played host to the large numbers of Army and Air Force establishments for all of the period (and earlier in the case of the army); and the NMR in particular contains the results of the *Defence of Britain* programme of monument recording. Three main categories of monument may be identified: Military camps/bases and airfields, providing accommodation for various activities, including training, administration, maintenance and testing; remains of training operations; and defences against attack in the First and Second World Wars, the remains from the latter event being more numerous.

5.405 In many cases the military bases are still in use, although many, especially those built specifically for wartime use, have been abandoned for some time. Examples would be Tilshead Airborne Camp (WHER SU04NW530) and Blakehill Farm Airfield (WHER SU09SE526). Others are scheduled for closure in the next few years, such as RAF Lyneham (WHER SU07NW526). Important sites are Yatesbury Airfield (WHER SU07SE526) founded 1916, and Netheravon (AMIE SU14NE541) the latter, the first operation military flying base (for training) in Britain, dating from 1913. Little survives on either of the earliest activity but both retain interwar buildings. In all, eleven airfields, mostly founded during the Second World War and abandoned at the peace, are noted in the ACAs by the HER, and a further six in the NMR data.

5.406 Army bases are of course still in evidence and very much in use at Tidworth, Bulford and Larkhill and Warminster. In themselves, the camps will retain all sorts of evidence for military history and policy in the county. However, none of these camps is listed *per se* in the HER or NMR data, but all form foci for extensive records of "military activity", either not further defined or consisting of evidence for training exercises such as trench-digging, or camp sites. (e.g. 17274-17361 at Tidworth: six entries, plus the railway mentioned above and four at Bulford). The trenches are mostly thought to date from World War One, based on their form, but could be earlier or later as most are only known from aerial photographs. Other sites that left traces in the ground are balloon-handling sites, barrage balloon anchors, searchlight and anti-aircraft batteries. The earthworks can look like prehistoric remains in aerial photographs.

5.407 Approximately 90 Second World War pillboxes or similar defensive structures are recorded by the NMR within the ACAs, and their function and position within larger defensive schemes has been clarified in the *Defence of Britain* project.

5.408 Decoy sites to confuse and divert enemy bombing raiders exist at Liddington Castle, near Swindon, and within the Crushed Stone ACA at Monkton Farleigh and Lacock

(AMIE1465563/1467509 and 1467598 respectively). Monkton Farleigh and Liddington both operated “Starfish” simulated explosion systems, elements of which still survive.

### *Conclusion*

5.409 It is not always clear what comprises a heritage asset (as defined by PPS5) in a period so near to us in time. Although the period is well-documented there is still much to be learned from the archeological record, not least because it can be so well-preserved, compared to earlier periods.

5.410 By the modern period both settlement and communications infrastructure were well-established. Towns formed a major focus of modern settlement and industry, but again, urban areas fall outside the study area. There are no rural settlements originating in the modern period recorded within the study area. The rural landscape experienced sustained intensification during the twentieth century, one result of which was the creation of larger fields in the post-war period. The period also includes widespread evidence of 20th-century industry, and military features generally dating to the Second World War.

## Summary of the Archaeological Resource

5.411 A summary of the archaeological resource identified by period is detailed in Table 5.15 below.

Table 5.15 Summary of the archaeological resource

| Period | Conclusions |
|---|---|
| Palaeolithic | The main type of evidence for the Lower, Middle and Upper Palaeolithic comprises worked lithics derived from river terraces, with finds deeply stratified below accumulated sand and gravel deposits. Within the study area, Palaeolithic finds are most commonly recorded within the main river valleys, in particular the Salisbury Avon AS-A and Kennet AS-A. This distribution would be expected due to the greater probability of Palaeolithic finds within river terrace deposits, and this is reflected by the fact that the vast majority of residual Palaeolithic finds are revealed by aggregate extraction within river terrace deposits. No *in situ* Palaeolithic sites occur within the study area, which is perhaps not unexpected due to the absence of raised beach and cave sites.<br><br>The Lower Palaeolithic, with its distinctive Acheulian axes, is perhaps best represented within the study area. Conversely, the Middle and Upper Palaeolithic remain relatively elusive in terms of residual artefacts and stratified sites. |
| Mesolithic | Mesolithic deposits within the ACAs comprise two distinct types of site. The first type comprises un-stratified surface finds, which have generally been disturbed by later activities such as ploughing. These include sites with larger numbers of lithic material which probably represent flint working sites, as well as single finds, or small numbers of lithics (including axes and adzes), which probably represent different depositional processes including loss and disposal. Particular concentrations of these surface finds have been recorded in the South-West AS-A and the Kennet AS-A.<br><br>The second type of site comprises stratified Mesolithic deposits, which are much rarer. These may occur as deeply stratified finds sealed beneath peat deposits, or potentially beneath tufa deposits. Although rare, the former has been identified in the major river valleys including the Salisbury Avon AS-A and the Kennet AS-A. No domestic or monumental sites are recorded in the study area. |
| Neolithic | There are three main categories of Neolithic evidence comprising monumental sites, settlement sites and remains of material culture. Monuments, such as Avebury and Durrington Walls, are amongst the most visible features of the period and indeed the present landscape. Settlement sites are less well-represented and what evidence there this has primarily been identified by excavation. The third category comprises evidence for material culture, which predominantly conmprises scatters of worked flint.<br><br>Particular concentrations of monumental sites are recorded in the Kennet AS-A and Salisbury Avon AS-A, in the form of the Avebury, Stonehenge, and Marden monumental landscapes respectively. Away from these foci, Neolithic monumental sites are comparatively rare. Settlement evidence is rare, but there appears to be a broad association with known monumental sites and in recent years evidence for 'domestic' activity has been recorded from monuments such as Durrington Walls and Avebury.<br><br>The widespread distribution of lithic material across the study area is suggestive of broad Neolithic activity, and is not particularly linked to large monumental sites. Lithics are recorded in particular concentrations within the South-West AS-A, in a region almost devoid of monumental forms or settlement evidence. |

| Period | Conclusions |
|---|---|
| Bronze Age | The Bronze Age is represented by several major forms of evidence. Monumental forms, such as henge monuments and ceremonial enclosures, display a continuity of use from the Late Neolithic to the Early Bronze Age. These monumental forms are focused on the established Late Neolithic ceremonial complexes discussed in the preceding section. The most visible form of Bronze Age activity comprises round barrows, which are recorded across the study area and can occur either singly or as part of larger barrow cemeteries. Round barrows with no surface expression may also be recognised as cropmarks or by techniques such as geophysical survey.<br><br>Evidence for settlement is still limited, but greater from the Middle Bronze Age onwards. Typically, evidence for settlement has been identified by archaeological investigations prior to gravel and sand extraction on the river terraces. Evidence for agriculture, in particular field enclosures and boundaries, has also been recorded by archaeological investigations in the river terraces, and is occasionally associated with settlement sites. Large linear earthworks, which appear to be territorial in nature, are essentially peripheral to the study area and are more closely associated with the uplands, such as Salisbury Plain and the Marlborough Downs. Bronze Age find assemblages is dominated by metalwork and lithics which are recorded widely across the study area. |
| Iron Age | Evidence for Iron Age activity within the study area comprises a number of broad forms. The most visually dominant form is hillforts, which can comprise very large scale univallate and multivallate enclosures. These are predominantly found in the higher western part of the study area, particularly the South West AS-A. Less monumental forms of Iron Age settlement (both enclosed and unenclosed) are found across the study area, with particular concentrations in the Thames Valley AS-A, and a lesser extent the Salisbury Avon AS-A. Evidence for the agricultural landscape, such as field boundaries and trackways, is closely linked to evidence for domestic settlement in this period. Unlike earlier periods, burials are not generally associated with monumental forms, and are thus much less a feature of the prehistoric landscape. Iron Age mortuary remains are typically found in association with settlements. Iron Age metalwork can comprise larger deposits such as hoards, as well as single finds (including, for the first time, coins). From the Middle Iron Age onwards pottery is very common, both within settlement sites and the wider agricultural landscape. |
| Roman | Evidence for Roman activity is widespread and encompasses a wide range of monument types. These include villa and non-villa rural settlement, including a range of sizes and types, farms, villages and field systems. Within the study area, these forms of settlement evidence are commonly found close to known towns (including small towns), and in the vicinity of roads as roadside settlement. A noticeable concentration of both villa and non-villa settlement sites in the upper reaches of the Salisbury Avon AS-A. Small towns, may be market, religious, industrial or administrative centres or combinations of all of these (and include one centre that was massively fortified at the end of the Roman period). A greater number of towns are represented in the northern part of the study area.<br><br>Further categories of Roman evidence comprise burials and cemeteries, roads, and possible canals. The former category is particularly found in association with known Roman settlements. There is little evidence of a significant military presence at any period. Stray finds indicate some kind of Roman activity over the whole county. |

| Period | Conclusions |
|---|---|
| Early medieval | Evidence for early medieval occupation is generally from excavated sites, comprising sunken-feature buildings and post-built halls. There is evidence for settlement continuity at Romano-British rural settlement sites into the early medieval period, although identification can be hindered by a lack of diagnostic artefacts. Excavated sites are recorded in the main river valleys within the study area, comprising the Thames Valley AS-A, Salisbury Avon AS-A and Kennet AS-A. Documentary sources, such as the Domesday Book, provide evidence for settlement established by the late Saxon period, although many of these may have originated at an earlier date. Many of these sites comprise existing towns and villages. Early medieval burials are generally rare, although where found they appear to favour locations overlooking river valleys, such as the Thames Valley AS-A and Salisbury Avon AS-A, or in the vicinity of prehistoric monuments. A number of extant churches within the study area have Anglo-Saxon origins. Early medieval finds are generally rare, but those examples recorded have commonly been identified through metal-detecting. |
| Medieval | Evidence for medieval activity is widespread and encompasses a wide range of monument types. Some medieval monuments such as castles and moated manor houses form a prominent part of today's landscape. Castles are generally quite rare, although the distribution of such fortified sites is noticeably focussed towards the west of the study area. Moated manor houses, on the other hand, are more highly represented in the north-west of the study area. Around 400 medieval settlements are recorded across the study area, in a pattern of dispersed settlement. Around half of these comprise sites of deserted or shrunken settlement, and the remainder remain as villages, hamlets or small towns to this day. There is evidence of former medieval open-field systems across the study area, including distinctive boundary types and earthworks such as ridge and furrow.<br><br>There is generally little physical evidence for medieval industry within the study area, although documentary sources indicate a widespread system of watermills in most parishes, particularly the major river valleys. Excavated medieval mills are rare. Medieval finds are widespead, particularly pottery which was commonly deposited during manuring of fields. |
| Post-medieval | Remains from this period are widespread and well-preserved within the study area, with many more surviving types of evidence than preceding periods. This includes elements of the infrastructure, such as canals, railways and turnpikes, which are still in use today as well as a vast number buildings<br><br>Both rural settlements and towns saw sustained expansion through the post-medieval period, but it is important to note that the former, as urban areas, are outside the study area. This growth largely represented a development of the settlement pattern established in the medieval period. The majority of farmsteads and agricultural outbuildings within the study area date to this period and survive well within the ACAs. The post-medieval period saw the widespread enclosure of field systems across the ACAs, and agricultural remains include watermeadows, focused particularly in the Salisbury Avon AS-A, and ridge and furrow earthworks. Other landscape features include Great Houses and Parks and Gardens which were developed in this period. The period also saw industrial expansion, including evidence for the widespread development of watermills, particularly in the north-west of the study area. |
| Modern | It is not always clear what comprises a heritage asset (as defined by PPS5) in a period so near to us in time. Although the period is well-documented there is still much to be learned from the archeological record, not least because it can be so well-preserved, compared to earlier periods.<br><br>By the modern period both settlement and communications infrastructure were well-established. Towns formed a major focus of modern settlement and industry, but again, urban areas fall outside the study area. There are no rural settlements originating in the modern period recorded within the study area. The rural landscape experienced sustained intensification during the twentieth century, one result of which was the creation of larger fields in the post-war period. The period also includes widespread evidence of 20$^{th}$-century industry, and military features generally dating to the Second World War. |

# 6. MANAGEMENT OF THE ARCHAEOLOGICAL RESOURCE

## Mitigation, Methodological and Strategy Review

6.1 The following section reviews the way in which the archaeological resource is currently investigated and managed within the Aggregate Character Areas with reference to the aggregates quarries with recorded associated archaeological works. Current approaches are evaluated, and recommendations and suggestions for future approaches proposed.

### *Previous Aggregate Investigation*

6.2 Previous archaeological investigations associated with aggregate mineral extraction are recorded for thirteen aggregate quarries/quarry complexes within Wiltshire (none are recorded within Swindon). Previous archaeological works relating to mineral extraction are detailed in alphabetical order by quarry in Table 6.1 (quarries are illustrated on Figs. 3 and 4), and are discussed below.

Table 6.1 Summary of archaeological works relating to aggregate extraction

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| Cleveland Farm Complex | 1984-90: Programme of archaeological works. Recorded Iron Age and Romano-British Settlement and Saxon activity; putative Neolithic long barrow. | 1984 earthwork survey (Wessex Archaeology) | Earthworks associated with Iron Age/Romano-British settlement. | - | CBA1984; Powell, Jones and Mepham 2008; WA 2007 | WA10/1 |
| | | 1984 trial trench evaluation (Wessex Archaeology) | Romano-British settlement features. | **SU09SE202** **SU09SE321** 1046952 | CBA1984; WA 1984; Powell, Jones and Mepham 2008; WA 2007 | WA10/2 |
| | | 1988 excavation (Wessex Archaeology) | Trackways and boundary ditches. | - | Coe Jenkins and Richards 1991; Powell, Jones and Mepham 2008; WA 1989a; WA 2007 | WA10/3 |
| | | 1988 earthwork survey (RCHME) | Earthworks associated with Iron Age/Romano-British settlement. | - | Coe Jenkins and Richards 1991; Powell, Jones and Mepham 2008; WA 1989a; WA 2007; WAM 1990, 218-19 | WA10/4 |
| | | 1988-9 excavation (Wessex Archaeology) | Features associated with Iron Age/Romano-British settlement. | **SU09SE202** **SU09SE321** 899769 | Coe Jenkins and Richards 1991; WA 1989; Powell, Jones and Mepham 2008; WA 1989a; WA 2007; WAM 1990, 218-19 | WA10/5 |

† Note that Wiltshire HER does not currently hold archaeological event information in an accessible digital format, HER references given in relation to works relate to records for archaeological sites/features which reference the relevant archaeological works in the description/comment field.

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| | | 1989 geophysical survey (magnetometry and resistivity) (Ancient Monuments Laboratory) | Identified ditch systems visible on aerial photographs. | 1009080 | Coe Jenkins and Richards 1991; Powell, Jones and Mepham 2008; WA 1989b; WA 2007 | WA10/6 |
| | | 1989 geophysical survey (resistivity) (GSB Prospection Ltd) | Identified anomalies consistent with areas of building rubble/cobbling. | - | Coe Jenkins and Richards 1991; Powell, Jones and Mepham 2008; WA 1989b; WA 2007 | WA10/7 |
| | | 1988-89 watching brief (Wessex Archaeology) | Features associated with Iron Age/Romano-British settlement. | 899723 | Coe Jenkins and Richards 1991; Powell, Jones and Mepham 2008; WA 1989b; WA 2007; WAM 1990, 218-19 | WA10/8 |
| | | 1989 trial trench evaluation (Wessex Archaeology) | Features associated with Iron Age/Romano-British settlement. | 1046943 | Coe Jenkins and Richards 1991; Powell, Jones and Mepham 2008; WA 1989b; WA 2007 | WA10/9 |
| | | 1990 watching brief (Wessex Archaeology) | Features associated with Iron Age/Romano-British settlement. | - | Powell, Jones and Mepham 2008; WA 2007 | WA10/10 |
| | (At Rixon Gate) A programme of works in 1992 comprising fieldwalking, survey, trial trench | 1992 fieldwalking (Wessex Archaeology) | Unknown | 915708 | WAM 1994, 149-50 | WA10/48 |
| | | 1992 earthwork survey (Wessex Archaeology) | Thought to represent a Romano-British building. | - | WAM 1994, 149-50 | WA10/49 |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| | evaluation and excavation. | 1992 trial trench evaluation (Wessex Archaeology) | Recorded undated features. | **SU09SE203**, **322** 915708 | WA 1992a; WAM 1994, 149-50 | WA10/50 |
| | | 1992 excavation (Wessex Archaeology) | Iron Age/Romano-British settlement. | **SU09SE648**, **611**, **623** | WA 1992b; WAM 1994, 149-50 | WA10/51 |
| Cotswold Community/Shorncote | 1988-2000: A series of archaeological works including evaluations and open-area excavations in Gloucestershire and Wiltshire. Recorded a multi-period landscape with activity dating from the Neolithic onwards. | 1988-9 evaluation including trial trench evaluation and cropmark analysis.(Gloucestershire and Wiltshire) (Gloucestershire County Council) | Romano-British Settlement. Bronze Age features. | - | Parry 1988; Parry 1989; WAM 1996, 145 | WA10/11 |
| | | 1990 excavation, salvage work following topsoil stripping and test-pits (Gloucestershire) (Oxford Archaology) | Neolithic/Bronze Age barrow cemetery, Bronze Age cremation cemetery, Iron Age settlement, Romano-British field system. | (Gloucestershire) | Barclay, Glass and Parry 1995; Glass 1991 | (N/A: Gloucestershire) |
| | | 1992 excavation (Gloucestershire) (Wessex Archaeology) | Bronze Age settlement. | (Gloucestershire) | Hearne and Heaton 1994 | (N/A: Gloucestershire) |
| | | 1994 trial trench evaluation (Gloucestershire and Wiltshire) (Wessex Archaeology) | Bronze Age and Romano-British features. | **SU09NW152-154** and **301** 104680 | WA 1994; WAM 1996, 145 | WA10/12 |
| | | 1995-6 excavation (Gloucestershire) (Wessex Archaeology) | Bronze Age settlement. | (Gloucestershire) | Hearne and Adam 1999 | (N/A: Gloucestershire) |
| | | 1997-8 excavation (Gloucestershire) (Oxford Archaeology) | Bronze Age/Iron Age settlement, Romano-British field system. | (Gloucestershire) | Brossler *et al* 2002 | (N/A: Gloucestershire) |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| | | 1999-2000 excavation (Gloucestershire and Wiltshire) (Oxford Archaeology) | Identified activity dating from the Bronze Age to medieval period. | **SU09NW155**, **201**-**2**, and **624** 1337106 | CBA 2000, 58; OA 2000; Powell, Smith and Laws 2010; TBGAS 2000; WAM 2001, 244 | WA10/13 |
| | | 2001 excavation (Gloucestershire and Wiltshire) (Oxford Archaeology) | Identified activity dating from the Neolithic to the Saxon period. | - | Powell, Smith and Laws 2010 | WA10/14 |
| | | 2002 excavation (Gloucestershire and Wiltshire) (Oxford Archaeology) | Identified activity dating from the Neolithic to the medieval period. | **SU09NW400** | OA 2003; Powell, Smith and Laws 2010; WAM 2004, 301 | WA10/15 |
| | | 2003-4 excavation (Gloucestershire) (Oxford Archaeology) | Recorded a Romano-British farmstead. | - | OA 2004; Powell, Smith and Laws 2010; WAM 2004, 301 | (N/A: Gloucestershire) |
| | | 2004-5 excavation (Wilshire) (Thames Valley Archaeological Services) | Iron Age settlement. | - | Powell, Smith and Laws 2010. | WA10/16 |
| | | 2006-7 excavation (Gloucestershire and Wiltshire) (Thames Valley Archaeological Services) | Romano-British field system. | 1516570 1516575 | Powell, Smith and Laws 2010; TVAS 2009a | WA10/17 |
| | | 2008 (Gloucestershire) (Thames Valley Archaeological Services) | Bronze Age, Iron Age and Romano-British features | (Gloucestershire) | Powell, Smith and Laws 2010; TVAS 2009b | (N/A: Gloucestershire) |

| Quarry | Archaeological Works | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|
| Eysey Manor Farm | 1999 trial trench evaluation (Cotswold Archaeology) | Neolithic/Bronze Age ditch, Iron Age settlement. Prehistoric, Roman, medieval, post-medieval and undated features. | **SU19NW101**, **203**-**206**, **324**-**5**, **528**-**9**, **626**, **638**-**642** 1337476 | CA 1999; WAM 2001, 248 | WA10/18 |
| | 2004-5 excavation (Thames Valley Archaeological Services) | Multi-period landscape including Bronze Age and Iron Age settlement, Roman features, a medieval moated manor house and post-medieval water meadows. | - | TVAS 2008a | WA10/19 |
| Freeth Farm | 2007 desk-based assessment (Thames Valley Archaeological Services) | - | 1519910 | TVAS 2007 | WA10/20 |
| Kent End Farm | 1980 watching brief (Organisation unknown) | Medieval pottery | **SU09SE458** 899774 | WAM 1982, 177 | WA10/21 |
| Knockdown Quarry | 2008 desk-based assessment (Cotswold Archaeology) | No archaeological finds or features recorded within the quarry site. | **-** | CA 2008 | WA10/22 |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| Lady Lamb Farm | 1993 trial trench evaluation covering 40ha, 10 of which fell within Wiltshire (the remainder is in Gloucestershire) (Oxford Archaeology) | | In the Wiltshire area of the site, features identified on aerial photographs thought to be of archaeological origin proved to be geological. (In Gloucestershire, Bronze Age/Iron Age features, possible Saxon SFB, medieval cultivation). | (Gloucestershire HER PRN 2505/3223/3224). | WAM 1995, 150 [Grid reference is incorrectly recorded as SU, rather than SP] | WA10/23 |
| Latton Lands | 1992-3: A programme of archaeological works including desk-based assessment, fieldwalking, test pits and survey covering the whole site. | 1992 desk-based assessment (Tempus Reparatum) | - | 1314960 | Tempus Reparatum 1992 | WA10/24 |
| | | 1992 fieldwalking (Cotswold Archaeology) | Prehistoric flint, Roman, medieval, post-medieval and modern pottery. | **SU09NE102** **SU09NE457** 1049953 | CA 1993 | WA10/25 |
| | | 1992 test pits (Cotswold Archaeology) | Potential archaeological features, medieval pottery and post-medieval/modern material. | 1158982 1049953 | CA 1993 | WA10/26 |
| | | 1993 geophysical survey (Bartlett Clark Consultancy) | Recorded anomalies of potential archaeological origin. | 1049953 | Bartlett 1993 | WA10/27 |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| | | 1993 topographic survey (Royal Commission for Historic Monuments England) | Recorded medieval earthworks | | RCHME 1993 | WA10/28 |
| | 1995-2000: At the northern end of the quarry, trial trench evaluation followed by excavation and watching briefs. | 1995 trial trench evaluation (Cotswold Archaeology) | Bronze Age ring-ditch, Bronze Age/Iron Age ditches, post-medieval and undated features | **SU09NE150 SU09NE527 SU09NE624-6** 1073596 | CA 1995; WAM 1997, 156 | WA10/29 |
| | | 1997-2000 excavation and watching brief (Oxford Archaeology) | Bronze Age settlement, Bronze Age burial, Iron Age pits, medieval and post-medieval cultivation. | **SU09NE529 SU09NE629** 1337479 | Stansbie and Laws 2004; WAM 1999, 139; WAM 2000, 259; WAM 2001, 249; WAM 2002, 285; WAM 2006, 266; CBA 2001, 55 | WA10/30 |
| | 1996-7 watching brief and small-scale excavation (Wessex Archaeology) | | Prehistoric find, Roman finds and features, post-medieval and undated features. | **SU09NE316-17** 1222694 | WA 1996; WA 1998 | WA10/31 |
| | 1997-2007: In the southern area of the quarry, a programme of archaeological evaluation followed by excavation. | 1997 geophysical survey (Bartlett Clark Consultancy) | Linear anomalies associated with boundaries depicted on post-medieval cartographic sources. Possible ring ditch. | 1203251 | B-CC 1996 | WA10/32 |
| | | 1997 auger survey (Cotswold Archaeology) | Identified extent of organic peat and clays. | 1203251 | CA 1997a | WA10/33 |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| | | 1997 test pits (Cotswold Archaeology) | Identified the depth of organic and gravel deposits. | 1203251 | CA 1997a | WA10/34 |
| | | 1997 trial trench evaluation (Cotswold Archaeology) | Prehistoric enclosure/field boundary, ring ditch, Iron Age enclosure and post hole, Romano-British agricultural features, Saxon pit/ditch, post-medieval field boundaries, undated features. | **SU09NE201-3 SU09NE457 SU09NE550 SU09NE620** 1203251 | CA 1997a | WA10/35 |
| | | 1997 additional trial trench evaluation (Cotswold Archaeology) | Prehistoric and Romano-British agricultural features, Saxon pit/posthole, medieval/post-medieval cultivation and undated features. | 1203251 | CA 1997b | WA10/36 |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| | | 2004-7 excavation (Thames Valley Archaeological Services) | Recorded a Neolithic flint assemblage, Bronze Age field system, Bronze Age/Iron Age settlement, Romano-British ditches, Saxon post-built structure, and medieval and post-medieval cultivation. | 1509537<br>1462893 | TVAS 2008b; TVAS 2009c | WA10/37 |
| | 2001-4: in the central area of the site, watching brief and excavation (Oxford Archaeology) | | Identified a Neolithic/Bronze Age enclosure and Iron Age/Romano-British settlement. | - | Powell, Laws and Brown 2009; WAM 2002, 285; WAM 2004, 304; WAM 2006, 266 | WA10/38 |
| Latton Lands, Down Ampney Preferred Areas 1 and 6 | 2006 geophysical survey (Stratascan) | | Anomalies of potential archaeological origin. | 1513501 | Stratascan 2007 | WA10/39 |
| | 2007 trial trench evaluation (Thames Valley Archaeological Services) | | Prehistoric, Roman, early medieval and medieval finds. | 1466062 | TVAS 2007 | WA10/40 |
| Manor Farm Complex | 1971 excavation (Unaffiliated) | | Bronze Age finds, Romano-British settlement | **SU09SW300** 644104 | DoE 1972; WAM 1972, 171 and 173 | WA10/41 |
| | 1978 trial pit (Ancient Monuments Laboratory) | | Undated | **SU09SW614** 644107 | - | WA10/42 |
| | 1984 evaluation (Unaffiliated) | | Roman ditches | 992860 | CBA 1984, 7 | WA10/43 |

| Quarry | Archaeological Works | | Results | HER ref† AMIE ref | Source | Aggregates Database No. |
|---|---|---|---|---|---|---|
| North End Works (Bradley's Gravel Pit) | 1974 excavation (Swindon Archaeological Society) | | Iron Age activity | **SU09NW200** 655186 | WAM 1978, 134 | WA10/44 |
| Roundhouse Farm | 1991 trial trench evaluation (Oxford Archaeology) | | Bronze Age barrows, Iron Age settlement, Romano-British field system. | **SU19NW203**-**6**, **304**, **456**, **621**-**3**, **632** 658419 | OA 1991; WAM 1993, 162-3; CBA 1992, 107 | WA10/45 |
| | 2001 geophysical survey (GSB Prospection Ltd) | | Recorded features associated with known Iron Age settlement. | 1404481 | GSB 2001 | WA10/46 |
| | 2006-8 excavation (Thames Valley Archaeological Services) | | Iron Age and Romano-British settlement. | 1517472 | TVAS 2010 | WA10/47 |
| Sands Farm | 1992 archaeological evaluation comprising field walking and test pits. | 1992 test pits (Wessex Archaeology) | Bronze Age, Iron Age, prehistoric, Roman, medieval and post-medieval finds. | **SU07SW054**, **152**, **306**, **457** 1046478 | WA 1992c | WA10/52 |

### *Discussion of previous archaeological works associated with aggregate extraction*

6.3 Archaeological works are mainly associated with quarries exploiting the sharp sand and gravel deposits of the Thames Valley. Only three quarries with associated works are recorded outside this area. These are Freeth Farm and Sands Farm soft sand quarries and Knockdown crushed rock quarry. Recorded work at Freeth Farm and Knockdown comprise desk-based assessment, and work at Sands Farm was limited to fieldwalking and test pitting. In contrast, the archaeological investigations in the Thames Valley have been extensive. Substantial programmes of archaeological works are recorded for large quarry complexes, including Cleveland Farm, Cotswold Community and Latton Lands, typically comprising evaluation (including earthwork surveys, geophysical survey, fieldwalking, and trial trench evaluation) prior to excavation. For Cleveland Farm and Cotswold Community it can be seen that the commencement of these works pre-date the adoption of PPG 16 in 1990, reflecting early recognition of the importance of the archaeological resource in this area. For the larger quarries works are often spread over a long period of time and are undertaken by a number of different archaeological units.

*Case study 1: Cleveland Farm*

6.4 Cleveland Farm quarry, an active site, is located to the east of Ashton Keynes. Previously quarried areas have been flooded to create artificial lakes, part of the Cotswold Water Park.

6.5 Surveys of the river terrace gravels in the Thames Valley by Leech in the 1970s (Leech 1977) and by Richard Hingley in 1983-4, identified cropmarks and enclosures considered to be of national importance within the Cleveland Farm site and surrounding area (Powell, Jones and Mepham 2008, 1). Planning permission had already been granted for the quarry and targeted archaeological works were undertaken between 1984 and 1990 to record archaeological features at the site. These works, undertaken by Wessex Archaeology with students from Reading University and volunteers, were funded by English Heritage, with contribution from the developers (Powell, Jones and Mepham 2008, 1). The post-excavation stage and publication was funded by the ALSF. The report was published as an article in the Wiltshire Archaeology and Natural History Magazine (Powell, Jones and Mepham 2008) and is also available online via the ADS website.

6.6 The initial works in 1984 comprised earthwork survey and trial trench evaluation. These recorded elements of the previously identified Iron Age/Romano-British settlement. Given limited time and resources combined with the complexity of the archaeological site, the programme of works was designed to maximise the amount of information recovered. Work between 1988 and 1990 included excavation, further earthwork survey, geophysical survey (both magnetometry and resistivity), trial trench-evaluation and watching-briefs (see Table 6.1 above; Powell, Jones and Mepham 2008, 2-3).

6.7 Features predominantly related to the Iron Age and Romano-British settlement, although also included a putative Neolithic long barrow (Powell, Jones and Mepham 2008, 4). Both enclosed and unenclosed Middle to Late Iron Age settlement was identified (ibid, 5-6). There was evidence of landscape reorganisation in the Romano-British period, with a settlement shift and the establishment of a rectilinear field system (ibid, 5, 11).

6.8 Work at the Cleveland Farm site was constrained by available time and resources (Powell, Jones and Mepham 2008, 3). There is some limitation in the resulting report in terms of phasing (ibid). However, it does demonstrate the successful publication of an archaeological site over fifteen years after works were undertaken. The final report incorporates a summary of the phases of work, identified features and discussion and analysis of the environmental features (which included waterlogged material), and finds as well as placing the site in its local and regional context. No post-1990 work is recorded at the site.

*Case study 2: Eysey Manor Farm*

6.9 Eysey Manor Farm is a large quarry site covering *c.* 150ha located to the north-east of Cricklade. It was Preferred Area 2 identified in the 2001 Wiltshire and Swindon Minerals Local Plan (adopted November 2001, now superseded by the Wiltshire and Swindon Minerals Core Strategy 2006-2026 (adopted June 2009)). The Mineral Core Strategy DPD and Minerals Development Control DPD replaced all of the policies in the Minerals Local Plan except for Policy 35 relating to the allocation of the Preferred Areas. This policy will remain saved until replaced by the minerals site allocations DPD.

6.10 Two stages of intrusive work have been undertaken for the site so far. These comprise trial trench evaluation in 1999 (CA 1999; WAM 2001, 248) followed by excavation in 2004-5 (TVAS 2008). The trenching comprised 78 100m trenches and covered the entire proposal area. The results highlighted eight main areas of potential with activity dating from the Neolithic period onwards, with the Iron Age particularly well represented. Recorded features included a Neolithic/Bronze Age ditch, Iron Age features including evidence for settlement on areas of higher ground within the floodplain, evidence of Iron Age and Roman ironworking, medieval agricultural features and post-medieval water management features (ibid, 5-7). The archaeological features had suffered from plough damage (ibid, 7). The 1999 trial trench evaluation was undertaken on the advice of the County Archaeologist (CA 1999, 11) and informed an Environmental Statement.

6.11 Following the submission of the Environmental Statement permission for extraction was granted, with further archaeological recording works required as a condition to this permission. Initial works comprised excavation in 2004-5, funded by the developer. The 2004-5 works entailed full excavation for areas where works would result in the total removal of archaeological deposits, e.g. commercial extraction areas, and the location of silt ponds. In areas of plant only, building footings were fully excavated, with minimal recording and excavation of particularly 'fragile' features in the immediately surrounding area (TVAS 2008, 1). Excavated features included post-built Bronze Age round houses, extensive Iron Age settlement, a medieval moat and post-medieval water management features. Evidence of Roman activity at the site was limited. The report noted that most features had suffered from plough damage (TVAS 2008).

6.12 Eysey Manor Farm is an active quarry with reserves, an aggregate resource estimated at 2.7 million tonnes (WCC & SBC 2001, 69). Further archaeological work at the quarry is anticipated (Melanie Pomery-Kellinger, pers. comm.). This site demonstrates how work at an aggregate site recently granted planning permission has balanced the needs of the aggregate industry with the need to mitigate the threat to the archaeological resource. The site demonstrates how, following PPG16, evaluation has been used to provide information on the potential archaeological resource at the point of determination. Provision for this is also contained in the recently issued PPS5.

### *Status of Dissemination*

6.13 The works detailed in Table 6.1 have been added to the project-specific Aggregates database supplied by Wessex Archaeology. This generated fifty-two records, project numbers WA10/1-WA10/52. These records will be migrated into the main database, currently curated by Wessex Archaeology (main contact Richard O'Neill, Senior Project Manager, r.oneill@wessexarch.co.uk, Wessex Archaeology Ltd, Sheffield Office, Unit R6, Riverside Block, Sheaf Bank Business Park, Prospect Road, Sheffield, S2 3EN).

6.14 The status of dissemination is summarised in Table 6.2 below. Summaries of the individual works are detailed in Table 6.1 above.

Table 6.2 Status of Dissemination

| Quarry | Dissemination | Dissemination Complete? | Aggregates Database No. |
|---|---|---|---|
| Cleveland Farm Complex | Works at Cleveland Farm Complex undertaken between 1984 and 1990 have recently been published with the aid of funding from the ALSF. | Yes | WA10/1-10 |
| Cotswold Community/ Shorncote | Works undertaken by Oxford Archaeological Unit and Thames Valley Archaeological Services are discussed in detail in a recent monograph. Earlier evaluation works at the site are also referenced in this report. | Yes | WA10/11-17 |
| Eysey Manor Farm | The initial trial trench evaluation has a grey literature report and a journal note, and the 2004-5 excavation has a grey literature report. The site is active and additional works are expected. It would be appropriate to publish the results of the 2004-5 excavations as a short interim journal article and the results of the site as a whole may benefit from treatment in monograph form once extraction is complete. | No (recent work) | WA10/18-19 |
| Freeth Farm | A grey literature report associated with the desk-based assessment is available from the HER. | Yes | WA10/20 |
| Kent End Farm | Results of a 1980 watching brief were detailed in the Wiltshire Archaeology and Natural History Magazine. This is considered to be adequate dissemination. | Yes | WA10/21 |
| Knockdown Quarry | A grey literature report associated with the desk-based assessment is available from the HER. | Yes | WA10/22 |

| Quarry | Dissemination | Dissemination Complete? | Aggregates Database No. |
|---|---|---|---|
| Lady Lamb Farm | Dissemination in a long note in the Wiltshire Archaeology and Natural History Magazine appears to be appropriate for the results recorded in Wiltshire. | Yes | WA10/23 |
| Latton Lands | Archaeological works at this quarry have been undertaken over a long period of time by a number of different contractors. While some of the work at the quarry has been adequately disseminated via submission of developer control reports to the HER, journal notes and, in the case of the 2001-4 work by Oxford Archaeology, a journal article, some works would benefit from additional dissemination. The original desk-based assessment by Tempus Reparatum is not available from the HER. The works undertaken by Cotswold Archaeology in 1992-3 and in 1997 would have benefited from journal notes. Recent work by Thames Valley Archaeological Service would benefit from a journal article. | No (including recent work) | WA10/24-38 |
| Latton Lands, Down Ampney Preferred Areas 1 and 6 | The production of grey literature reports is considered appropriate for the work undertaken. These reports are in the process of being made available at the HER. Assuming no further works, dissemination will be considered to be complete once they are available. | No (recent work) | WA10/39-40 |
| Manor Farm Complex | The Roman site recorded at Manor Farm might arguably have benefited from a grey literature report rather than a journal note. However, given the length of time elapsed since the 1971 it seems unlikely that any such report could be generated. | No | WA10/41 |
| | The results of the trial hole in 1978 are not clear from the HER entry, but again it seems unlikely that this will be resolved | No | WA10/42 |
| | Although adequately recorded on AMIE, the 1984 evaluation would benefit from a HER entry. | Yes | WA10/43 |
| North End Works | Small-scale works wore adequately disseminated with a journal note. | Yes | WA10/44 |

| Quarry | Dissemination | Dissemination Complete? | Aggregates Database No. |
|---|---|---|---|
| Roundhouse Farm | The results of the initial 1991 evaluation by Oxford Archaeology were disseminated via a journal note. Work by GSB would have benefited from a journal note and the 2006-8 excavation by Thames Valley Archaeological Service would benefit from a short journal article. | No (recent work) | WA10/45-47 |
| Rixon's Gate | Although works are associated with grey literature reports and journal notes the results would benefit from dissemination as a short journal article. | No | WA10/48-51 |
| Sands Farm | A grey literature report associated with the desk-based assessment is available from the HER. | Yes | WA10/52 |

6.15 Prior to the completion of this project, there was no single source summarising the events which have taken place, the information in Table 6.1 has been drawn from a number of different sources (see *Methodology* above). The HER does not currently hold data for archaeological works in an accessible format. It is currently in the process of reviewing the way its data is stored, with a view to a transition to a GIS format.

6.16 Given the often long-running nature of aggregate extraction sites it is not unreasonable for there to be a time lag between the work and full publication. With the exception of some early pre-PPG16 investigations, works are accompanied by grey literature publications and often a note in the local journal (the Wiltshire Archaeology and Natural History Magazine). Certain sites have also longer interim reports in the local journal.

6.17 Seven quarry sites for which dissemination is not complete have been identified (see Table 6.2 above). Of these, work at Eysey Manor Farm is ongoing, although a short journal article detailing the interim results of the 2004-5 excavations (WA10/19) would be useful. Archaeological work at Latton Lands (WA10/24-38) finished in 2007. While the results of a number of works within the quarry have been adequately disseminated, some results require additional attention. This includes the 2004-7 excavations (WA10/37), for which it appears a local journal article would be appropriate. Other sites for which dissemination could be completed with the production of a short journal article comprise Roundhouse Farm and Rixon's Gate. For the Down Ampney Preferred Areas 1 and 6 (WA10/39-40), assuming no further works, dissemination will be complete once the associated reports are available from the HER (currently being processed). Although it might have been appropriate for work undertaken at the Manor Farm Complex in the 1970s (WA10/41-42) to have received a greater degree of dissemination, given the time lapse this situation is not likely to be resolved. While this is not ideal, it is not considered that this issue requires further attention.

**Previous impact of aggregate mineral extraction on the archaeological resource**

6.18 As part of this project, a brief consideration has been made of the impact of previous aggregate extraction.

*Thames Valley*

6.19 The most extensive area of mineral extraction has been in the Thames Valley. This area also has an important archaeological resource. Archaeological work associated with quarrying in the 1990s and 21st century has identified a widespread and complex archaeological resource, including multi-period landscapes and extensive evidence of prehistoric settlement (see Table 6.1 above). Much of this resource has been identified through destructive quarrying. While archaeological work associated with quarrying in this area may now be considered routine, earlier quarrying destroyed a number of cropmark sites without intrusive investigation (e.g. ring ditches at North End Works: SU09NW601-605), and is likely to have removed evidence of other archaeological features without record. That said modern archaeological recording at quarry sites in the Thames Valley began relatively early. Although no archaeological conditions have been identified for quarrying at the Manor Farm Complex, granted in the 1970s and 80s, some archaeological work was undertaken by local groups (see Table 6.1 above). Examples of early archaeological conditions, pre-PPG16, have been identified for areas of Kent End Farm (1981, N810514) and part of the Cleveland Farm Complex (1988, Manor Farm Leigh, N873097). It should be noted that archaeological conditions were not routine for the area at this time, and permission was granted for other areas without archaeological conditions attached. While some post-PPG16 permissions do not have archaeological conditions attached, they do become more customary after this date and extensive archaeological works are recorded for the major quarry sites such as Cotswold Community, Latton Lands, Roundhouse Farm and Eysey Manor Farm (see Table 6.1 above). These works have partially offset the loss of the resource through the information gained by recording and the identified sites have provided a great deal of important information on the area dating from the earlier prehistoric onwards.

*Quarries outside the Thames Valley*

6.20 Outside the Thames Valley, there is no known record of a major site being destroyed by quarrying. The level of detail readily available for the quarry sites means that it has not always been possible to assess which areas of any quarry have been worked out, limiting the assessment of the known impact of the archaeological resource. No archaeological finds or features are recorded within a large number of these sites. The resources referenced for this study have not identified any major archaeological sites that have been destroyed by quarrying. Only one designated site is recorded for these quarries, an extant barrow which is part of Landford Common Round Barrows Scheduled Monument, which is within the ceased Broomhill quarry. Other sites recorded within quarry areas include findspots and ridge and furrow earthworks. A Royal Air Force site is recorded within the area of Compton Bassett Quarry. It is probable, however, that quarrying has destroyed unrecorded archaeological features without record.

**Review of Old Mineral Permissions (ROMPs)**

6.21 See Appendix E.

### Investigation/ Mitigation

6.22 Archaeological advice on minerals projects is given by the Wiltshire Historic Environment Service. Applications for extraction which require Environmental Impact Assessment (EIA) go through the standard screening and scoping process. Where EIA is not required case officers advise on a case by case basis, previously in line with PPGs 15 and 16 and now PPS5, Planning for the Historic Environment. Guidance also follows *Mineral Extraction and Archaeology: A Practice Guide* produced by the Minerals and Historic Environment Forum (MHEF 2008) and in *Mineral Extraction and the Historic Environment* produced by English Heritage (EH 2008b). Required work commonly comprises a desk-based assessment where archaeological potential is suggested from consultation of the HER. If this suggests assets may be present but their precise nature is uncertain, further investigation (e.g. fieldwalking or trial trenching) may take place prior to determination of an application, or conditions for further recording applied to any permission granted. In cases above mitigation measures have comprised preservation *in situ* and watching briefs.

6.23 An investigation method which has proved rigorous and cost effective is the use of detailed magnetometry transects in geophysical survey of large sites. This may be suitable for the future investigation of large areas of proposed mineral extraction in Wiltshire. EH guidance on *Geophysical Survey in Field Evaluation* defines large areas as those over 20ha (EH 2008a, 18). In such cases it may be appropriate to undertake survey of transects giving at least 50% area coverage, with additional survey to 'fill in the gaps' at any identified areas of potential. This method benefits from being rapid, cost effective and giving good coverage of the site.

6.24 For areas of archaeological potential located on the floodplain of the river valley areas, use for specialised geophysical survey techniques, such as caesium vapour magnetometry, ground penetrating radar and electromagnetic conductivity should also be considered, as traditional techniques, such as standard gradiometry, may be of reduced effectiveness where deep overlying alluvial deposits are present.

## 7. RESEARCH FRAMEWORK AND AGENDA

7.1 The following framework and agenda highlight gaps in knowledge and potential areas of future work identified through the Resource Assessment. These are based upon the identified Aggregate Character Areas, although a number of key issues naturally have wider application. Reference has been made to the Regional Research Framework, *The Archaeology of South West England: South West Archaeological Research Framework* (SWARF; Webster 2007). The SWARF objectives are not listed again here but those which are of most relevance to the Wiltshire and Swindon Aggregate Character Areas are referenced.

### Period-based research agenda

7.2 The Resource Assessment was complemented by a healthy tradition of archaeological research within the ACAs, especially for the late prehistoric periods. The existing archaeological record provides a strong base from which to expand our knowledge of the archaeology of Wiltshire, and while it is recognised that opportunities for such work within the study area may be limited it is clear that research is needed both to expand our understanding and to ascertain whether gaps in the record represent a true lack of activity or if they reflect the focus of archaeological work and research elsewhere.

### *Palaeolithic*

7.3 Palaeolithic sites are relatively poorly recorded within the study area, and sites with the most significant deposits (i.e. *in situ* remains) are unlikely to occur within the study area, although have been recorded just outside the Sharp Sand and Gravel AS-A at Harnham. The period is represented by residual deposits, primary flint flakes and axes, and any further research into the Palaeolithic for the county should be promoted.

1. Further investigate the extent and chronology of Palaeolithic deposits. The Palaeolithic is poorly represented within the study area, although river terrace deposits provide the most suitable environment for their preservation. Further research is required into the taphonomic processes behind the deposition of Palaeolithic remains. The sourcing of the key components of the river gravels is an important area of research, and might help to establish the 'biography' of a find or assemblage.

2. The relationship between upland and river valley environments needs to be investigated further. The majority of the evidence comes from river valley environments, although stray finds have been recorded from upland locations.

3. Research should be focused upon the potential of river terrace deposits, especially because they represent the primary source of stratified remains within the study area. Predictive mapping techniques should be employed to identify high areas of potential, and when Palaeolithic deposits are recognised should be dated using scientific techniques (such as Optically Stimulated Luminescence). Sand and gravel deposits provide the primary source of Palaeolithic deposits and mitigation strategies should be re-assessed to ensure the Palaeolithic resource is well served by recent planning guidance.

4. The provenance of lithic artefacts requires further research, especially where distinctive raw materials have been utilised.

### *Mesolithic*

7.4 Mesolithic sites are well represented within the Soft Sand ACA, particularly within the South West and North West AS-A Greensand Formations, which seem to reflect genuine foci of activity. Lower than average densities are recorded within the Sharp Sand and Gravel ACA and Crushed Rock ACA.

5. Investigate the concentrations of Mesolithic finds within the Soft Sand ACA and attempt to explain why there seem to be particular foci of Mesolithic activity. Attempts to understand these particular concentrations will contribute to the wider understanding of human activity in Wiltshire during the Mesolithic. Greater analysis of the composition of flint assemblages as well as their topographical context may assist this aim.

6. Investigate the apparent absence of Mesolithic finds from large parts of the Thames Valley AS-A. Despite the identification of tufa deposit sites (which are often associated with Mesolithic deposits) throughout the Upper Thames area, there appears to be a widespread absence of Mesolithic material from the AS-A. It needs to be determined whether this absence is genuine, or simply the result of a lack of systematic study. Further research is required in the Thames Valley AS-A, and a tufa deposit site should be archaeologically investigated in the event of a suitable site being identified (SWARF Research Aim 18b).

7. The apparent relationship between axe/adze/macehead distribution and the Sharp Sand and Gravel ACA (typically river valleys) needs to be further investigated. Further research is required to determine whether these areas were favoured areas of Mesolithic activity, and whether the activities carried out in these regions differed from those represented by the assemblages identified within the Soft Sand ACA. Environmental analysis will help to improve our understanding of the Mesolithic landscape (SWARF Research Aim 2 and 25), especially within river terraces where there is the potential for waterlogged deposits.

8. The raw material used to produce recorded flint axes/adzes, and especially the stone maceheads, needs to be researched further. A greater understanding of the raw materials used in the production of Mesolithic tools in Wiltshire will help to understand the mobility of particular communities throughout the county. Petrological analysis of existing lithic implements may be beneficial.

9. There is a need for controlled site excavations to provide a well-dated assemblage to compare to unstratified assemblages. Evidence for Mesolithic settlement is extremely rare, although structures have been identified in the vicinity of Downton in the Salisbury AS-A, and further archaeological investigation in the vicinity should be encouraged.

10. Mesolithic flint assemblages, especially those comprising microliths, are often difficult to detect archaeologically, and recorded assemblages would benefit from re-assessment AMIEd to identify currently unrecognised Mesolithic elements.

***Neolithic***

7.5 The Neolithic is well represented within the Aggregate Character Areas by several monumental complexes of international significance. Unstratified Neolithic material is densely recorded across the study areas. Any opportunity for intrusive archaeological work investigating an identified or potential Neolithic site should be encouraged.

11. There has been an undue focus on uplands (especially Salisbury Plain and Marlborough Downs), at the expense of environs such as river valleys (Webster 2007, 278). This is especially noticeable in relation to the Test, Stour and Bristol Avon AS-As. The relationship between the uplands and river valleys during the Neolithic would benefit from further study, especially large-scale excavation projects and landscape studies.

12. The apparent absence of causewayed enclosures from within the study area requires further investigation. Detailed aerial survey followed by targeted excavation could lead to the identification of currently unrecorded sites.

13. The relationship between Cotswold-Severn megalithic barrows and non-megalithic earthen long barrows would benefit from further study. The study area is situated on the interface between the two traditions and further detailed excavation of Neolithic barrows should be encouraged.

14. Our knowledge of Neolithic settlement needs improvement, especially considering the recent discoveries of probable occupation sites at Durrington Walls and Marden in the Salisbury AS-A. Flint scatters are often assumed to represent Neolithic settlement sites, and if the opportunity arises, an example should be excavated to determine whether it relates to buried features below.

The features that typically relate to Neolithic settlement are slight, such as stakeholes and shallow hollows, and therefore require careful archaeological excavation.

15. We need to widen our understanding of monumentality in the Neolithic (SWARF Research Aim 54). The ACAs provide an especially rich environment in which to undertake this, with Late Neolithic monumental complexes of international significance, such as at Avebury and Durrington Walls. If an opportunity arises to study the wider landscape context of these monuments, particularly the role of river valleys and local topograhy, it should be taken.

16. The majority of round barrows within the study area are assumed to be Early Bronze Age monuments, but we need to determine how commonly Neolithic round barrows occur (SWARF Research Aim 54). Several sites within the ACA provide potential examples of late Neolithic barrow groups.

***Bronze Age***

7.6 Bronze Age sites, primarily barrows, are very well represented throughout the ACAs, especially within the Kennet and Salisbury Avon AS-As. Early Bronze Age settlement evidence is largely elusive, although a number of key sites have been identified. Later Bronze Age evidence primarily consists of settlement and agricultural sites, and these exhibit a particular focus in the Thames Valley AS-A.

17. A greater synthesis of Early Bronze Age grave assemblages is required. Broad trends have been realised but a greater understanding of the mortuary practices is required. Any opportunity to investigate Bronze Age mortuary practices should be encouraged.

18. There are several hundred currently undated barrows recorded within the study area. These are assumed to be Bronze Age in date, but intrusive works are required to confirm the form, age and function of these earthworks. Many of these barrows form part of wider barrow cemeteries and should an opportunity arise to investigate these earthworks it should be encouraged. Any potential excavations should be conducted in tandem with the use of scientific dating techniques to assist the formation of an absolute chronology for barrow forms.

19. Further research is required to explain the apparent gaps in the Early Bronze Age settlement record (SWARF Research Aim 3). The contrast between widespread Later Bronze Age settlement evidence and the relative elusiveness of Early Bronze Age settlement evidence is stark. Increased use of dating techniques at potential settlement sites should be encouraged.

**Strategy: Investigating possible Bronze Age barrows**

*The resource*
The Archaeological Resource assessment has identified a very large number of undated barrow earthworks and ring ditches within the study area. These earthworks are largely assumed to date to the Bronze Age, and include several prominent groups of earthworks which appear to form Bronze Age barrow cemeteries.

Previous work within the study area has demonstrated the potential for undated barrows to be positively dated to the Bronze Age. Ring ditches identified from aerial survey are less certainly identified as Bronze Age monuments, and can equally relate to later prehistoric roundhouses or other features.

*Nature of potential remains*
In some cases barrows survive as extant earthworks, which would have originally formed the earth/stone mound constructed over potential mortuary remains. These can be found in isolation as well as part of wider barrow groups or cemeteries. Elsewhere undated barrows survive as slight spreads of chalk or merely as ring ditches identified from aerial photography. Ring ditches represent the circular ditch which would have surrounded the central mound of many barrows. In such instances, the central mound has been truncated or eroded away and the encircling ditch is all that remains. However, mortuary remains located below the mound may still survive.

*How they might be detected*
Field survey has been useful in identifying extant earthwork barrows. Aerial photography has proven especially useful in identifying the ring ditch cropmarks that are often the only surface indication of a former barrow. Where no above ground remains are present, geophysical survey, in the first instance, might identify potential below ground remains. However, the cost and length of time involved prohibits its use over large areas.

Trial trenching is the only way to confirm the Bronze Age date of barrow earthworks or cropmark ring ditches. Fieldwalking can often record lithic scatters in the vicinity of barrows which may suggest broader Bronze Age activity.

*Application in aggregate extraction*
In the event of an area of proposed aggregate extraction incorporating a putative Bronze Age barrow it would be appropriate to implement a staged strategy for investigations. In the first instance a site visit to assess the area for any extant remains/visible earthworks. This might be followed by detailed geophysical survey. The results of the survey could be used to inform intrusive archaeological investigation, which might identify barrow construction material, primary and secondary mortuary remains, associated material culture and dating material. Scientific dating techniques should be used, where appropriate, to provide a greater chronology of Bronze Age barrow construction. In the event that a Bronze Age barrow is positively identified this information would feed back into our understanding and chronology of Bronze Age Wiltshire.

20. Absence of flint procurement in Wiltshire needs further analysis (Webster 2007, Research Aim 38). Despite the widespread use of flint throughout the Bronze Age and proceeding periods no major flint extraction sites have been identified within the study area.

21. The process of intensification and diversification of agriculture from the Middle Bronze Age could be better understood (Webster 2007, 40). The intensification of plough agriculture within Wiltshire has been recorded, but further work is required to determine how widespread this intensification was (SWARF Research Aim 3i). The study area provides an ideal mix of uplands and lowlands to facilitate such research. Remote sensing techniques have been well-employed within the study area to identify potential elements of the Bronze Age agricultural landscape, but this now needs to be followed by targeted intrusive works to determine the date of these features.

***Iron Age***

7.7 The Iron Age is well represented and clear distributions in the data can be recorded. Hillfort sites dominate the higher ground of the South-West AS-A, while agricultural settlement sites are clustered in the Thames Valley AS-A especially. The relationship between these forms of Iron Age site would be a useful research topic.

22. A dense concentration of Iron Age settlement is recorded in the Thames AS-A. These settlements are positioned on the fertile river terraces, and several investigations have focused on the wider landscape setting of these settlements. The interaction between these settlements and areas of lower agricultural productivity would be a useful research agenda. Further Palaeoenvironmental analysis of these settlement sites may provide useful information on Iron Age economic activities, while increased use of scientific dating may assist in improving our understanding of the transition from the Early to Late Iron Age (SWARF Research Aim 16i).

23. The relationship between different settlement forms requires further research. Large-scale excavations and landscape studies should be encouraged to provide a wider perspective on Iron Age settlement interaction and organisation. Hillfort sites especially require a wider landscape perspective, and cannot be interpreted in isolation. The role of enclosure is especially poorly understood, and further attempts should be undertaken to explain why certain areas are dominated by unenclosed settlements (i.e. The Thames Valley AS-A), while elsewhere enclosed sites prevail (i.e. South-West AS-A).

24. The abandonment of hillforts during the Later Iron Age requires further study, and terminal dates for hillfort use can only be acquired through intrusive works. However, it is very unlikely such sites are to be investigated by mitigation works associated with aggrergate extraction. Alternatively, it may be more useful to focus upon the role of enclosure in areas where hillfort sites are not recorded, as in the Thames Valley. Furthermore, the increase in settlement recorded in areas such as the Thames may reflect changes in the perception of hillfort sites and the role of enclosure within Iron Age society. As such, mitigation strategies focused upon non-hillfort sites may, by proxy, inform us of the perception of hillfort sites.

25. Little Woodbury provided the type-site for small Iron Age settlement, and several further potential examples of this settlement form have been identified by survey within the study area. Modern excavations of Iron Age settlement are required,

especially away from the relatively well-investigated Thames Valley AS-A, to determine the chronology and function of these settlement sites. Increased sampling for plant microfossils from a range of contexts may assist attempts to understand site function (SWARF Research Aim 17b).

26. Our understanding of Iron Age material culture has been relatively neglected (SWARF Research Aim 14), and coinage would especially benefit from further research. The study area is located at the boundary of several tribal territories and the distribution of respective coinage may be useful in exploring the relationships between these political units.

27. Iron Age mortuary practices, where recorded, appear to be incredibly diverse. However, burial practices are generally not well recorded, and further research into the mortuary practices of Iron Age communities is required. Any opportunity to investigate further examples of Iron Age burial should be encouraged. be made to improve our knowledge of mineral extraction especially (SWARF Research Aim 38). Sites within the study area, such as Pen Pits, provide a good potential research site to further our knowledge of prehistoric mineral extraction within the study area.

28. The study of Iron Age votive deposits, especially those associated with watery contexts may benefit from mitigation works associated with aggregate extraction. Further archaeological research of the river terrace gravels may potentially identify hoard sites and votive deposits, in association with the major river valleys, which otherwise have no surface expression.

**Strategy: Investigating Iron Age settlements**

*The resource*
The Archaeological Resource assessment has identified particular concentrations of Iron Age settlement, especially in the Thames Valley AS-A. Where excavated, such as at Cotswold Community (OA 2010), these Iron Age settlements appear to form parts of wider, complex, agricultural landscapes. Elsewhere in the study area, Iron Age settlement is not as prolific and further research would add to the picture of Iron Age Wiltshire.

Previous work within the study area has demonstrated that Iron Age settlements can be occupied for considerable time spans and shift location over several phases of use. It has also shown that a single settlement can alternate from enclosed to unenclosed over time.

*Nature of potential remains*
Iron Age settlements typically comprise groups of roundhouses, represented by postholes and gullies. These are often found in association with large storage pits, 'four-poster' structures, gullies, and ditches. These settlements can often be enclosed by an earth bank and ditch or timber palisade. Occasionally, the enclosing bank may survive as an earthwork. More often settlements are revealed as cropmarks during aerial survey or as anomalies during geophysical survey.

Settlement sites often possess significant palaeo-economic information, such as cereal and plant remains, as well as evidence for small-scale industry. Furthermore, they often provide midden material and evidence for domestic activity.

*How they might be detected*
Aerial survey has proved to be especially useful in identifying Iron Age settlement sites, particularly on the well-drained river gravels which produce clear cropmarks and parchmarks. Occasionally settlement sites will be revealed through extant surface features. Where no above ground remains are present, geophysical survey might identify potential below ground remains, especially boundary and field ditches, as well as pit features.

Aerial survey and geophysical survey are particularly effective methods of detecting Iron Age settlements, but need to be followed by intrusive works to provide accurate dating. Scientific dating techniques and detailed palaeoenvironmental studies should be employed alongside excavations to provide greater detail regarding site phasing and economic activities.

Application in aggregate extraction
In the event of an area of proposed aggregate extraction incorporating a putative Iron Age settlement, it would be appropriate to implement a staged strategy for investigations. The identification of the site should be followed by detailed geophysical survey. The results of the survey would provide an indication of the extent of the Iron Age settlement and associated field systems, and could be used to inform intrusive archaeological investigation. Excavations within the settlement are likely to identify domestic deposits and agricultural features. Works should also be focused on the wider setting of the settlement to provide a landscape perspective, including the site's relationship to surrounding agricultural features and further settlement sites. In the event that an Iron Age settlement is identified, especially outside the Thames Valley AS-A, information would complement our understanding and chronology of Iron Age Wiltshire.

### *Roman*

7.8 Roman remains are well attested and numerous in Wiltshire and to a proportionate degree in the aggregate areas. Research aims against this background can be quite detailed.

29. The role and hierarchy of towns and the relationship to rural settlement is a continuing area for research in the ACAs of Wiltshire, and much has been done in this regard in the county generally. Excavation and survey of settlements and settlement pattern both in the ground and in archives would provide data to help develop and refine hypotheses about these concerns. More is needed to be learnt about the level and range of urbanisation in the various sites identified as urban, for example the identification and characterisation of potential *mansiones*, and *mutationes*, defensive circuits, evidence of planning, zoning or lack of them. Equally, little is known about origins, although the relationship of *Cunetio* and *Sorviodunum* to Iron Age centres is suggestive. As Roman towns are now rural sites, they are under threat, where not otherwise protected, from other activities as well as the potential for aggregate extraction. Most of these sites are high priority for preservation so that academic research programmes can be formulated and put into effect when appropriate.

30. The main roads are reasonably well known, although there are considerable gaps. Smaller roads tend to be discovered by chance in excavation but can also be recognised in crop marks and cartographic work. Many, if not the great majority are likely to have pre-Roman origins. Few are known except in areas where landscape studies have been carried out, such as the military training areas of the chalklands. River and valley crossings are not known in detail, although fords and bridges, the latter in both timber and stone, are likely to have existed. None are known archaeologically. Opportunities to investigate and characterise smaller roads, especially at the level between farm tracks and trunk routes, all river crossings, and to clarify routes, should be taken wherever possible, as the degree, level and ease of road communication would have been a key element in the trading and other relationships of various settlement types. There may be some opportunity to identify the locations of bridges where projected courses of roads cross floodplains in the river terrace valleys.

31. It has been suggested that water transport was at least an element in inland communication. All opportunities to investigate possible water ways, should be taken, both routes and design details such as wharfs and quays, sluices and locks and the relationship of sites to navigable rivers.

32. While it is presumed that all rural settlement is primarily agricultural, the relationship of settlement to landscape has been explored in detail only in the chalk upland and dissecting valley landscapes (Fulford et al 2006, Fowler 2000). The elucidation of economic frameworks in other areas and landscapes, especially the north and north-western clay vales needs work (SWARF Research Aim 22G and 41), although much has been done in the Thames Valley. A clearer idea of the settlement pattern and density in the valleys is emerging but it appears more needs to be done (Draper 2006, 7). Settlement patterns around and related to the Savernake pottery industry are little known or the connection, if any, with the establishment and development of Cunetio. A useful *tour d'horizon* of the state of knowledge of Roman settlement and agriculture in north Wiltshire is found in Hostetter and Howe, 1997, 40-51), and an interesting study of villas on the Marlborough Downs has been carried out (Walters 2001, 127-146). From this it is clear that while the broad distribution of settlement and to

some extent settlement type is likely to be adequately known, it is also clear that interpretation is based on a relatively narrow base of evidence. More work is necessary on environmental evidence (animal bones, plant and seed remains from fields and settlements) and on better-defined chronological depth, as it seems probable that there were changes over the Roman period. In this context it is also noteworthy that sometimes thich deposits of alluvium may overlie Roman ground levels in the river valleys, and evidence for Roman activity is much less apparent in these locations – although it may actually survive particularly well.

33. The distribution of villas in Wiltshire and the possibility of villa-free zones is still unresolved, although much progress has been made in recent years. It seems reasonably clear that towns give rise to villa clusters and that the absence of villas in the south-west of the county is a consequence of the absence of a Roman town in that direction. On the other hand the evidence for the identification and dating, let alone characterisation, of a villa is very varied from site to site, and possibility of further lowland villas such as those along the Salisbury Avon, and the implication for land use, needs to be noted. The possibility that villas were part of a "chalk and cheese" split like that noted for the later periods in Wiltshire is hinted by environmental remains at various villas and is another area for research (Draper 2006, 14).

34. it is perhaps inappropriate to separate out "religion" as a separate subject, as it was so intertwined with everyday life in Roman times. However, recognising elements and influence of religious belief and practice is an obvious concern in research. It seems probable, for example, that the settlement around Silbury Hill had a religious origin or function. Its relationship to the hill, the Roman road and its internal layout are worthwhile subjects for research. The archive of the Camerton excavation might also be a fruitful subject for research. There are no rural shrine sites in the ACAs unless a villa or rural site should turn out to be one, for example Littlecote, or Box villas. They seem rare in Wiltshire, as only Cold Kitchen Hill (not in an ACA) seems a likely candidate. Otherwise, religious practices and beliefs are just as likely to be evidenced in "ordinary" sites.

35. It is evident that the great variation of burial practices is likely to reflect a range of responses to Romanisation in the county, from retention of native practices to full adoption of Roman ones. The time-scale and status-distribution of such variations, and their relationship to settlement type, pre-Roman and continental Roman practices, topography etc., would be important research aims. Cemeteries outside towns are notable by their comparative absence, but their presence, absence or character would make an important contribution of the study of urbanisation.

36. The origins and organization of the Savernake pottery industry are of considerable county importance. Was it seasonal, run by small-scale individual enterprises rather like the free miners in the Forest of Dean, or was it run by landowners or entrepreneurs living locally or further away? Better and wider understanding of individual production sites and the local settlement pattern, including villas, may lead to a clearer grasp of the industry's organization.

37. It may be possible to identify forestry management practices where charcoal or waterlogged wood survives. This would tie into the pottery industry and perhaps a wider fuel supply industry (for heating villas for example).

38. The use of quarried stone, especially oolite building stone is widely attested in the county. A basic question is whether quarrying was an industry or an ad hoc activity related to specific building campaigns. The regular extraction of large blocks from the quarries suggests the former may have been the case. The identification of quarrying techniques on cut stone may allow this question to be addressed. Attention paid to more careful identification of stone types will aid in locating sources and analysing distribution patterns. Import of stone from afar is also a useful indicator of wealth of the client as well as of distribution patterns.

39. Finds distributions are useful raw data but need analysing against a varied selection of other criteria. They can identify otherwise unknown settlements and even, in adequate abundance, characterise and date sites. Find spots, the more accurately plotted the better, are essential to extract more than a minimum value from stray finds. The PAS has hugely improved the quality of the stray finds record. Finds may, crudely, indicate both wealth and distribution variations within the county, in particular, diachronically. This collection of data should not be neglected when other kinds of information are to be interrogated.

**Strategy: Investigating Roman rural settlement**

*The resource*
The Archaeological Resource assessment has recorded the widespread distribution of Roman rural settlement (ranging from villa sites to small roundhouse settlements) across the study area. Villa settlements appear to concentrate on the Crushed Rock and Soft Sand ACA, while non-villa forms of settlement are recorded more widely, with especially significant sites recorded in the Thames Valley AS-A.

Previous work within the study area has demonstrated the variety that exists in Roman rural settlement form. Villa sites appear to have a varied economic base, most likely with a strong agricultural basis, while non-villa settlement appears to be predominantly focused upon arable agriculture. Roman rural settlement represents an intensification and expansion of Iron Age settlement patterns, and previous archaeological investigations have identified extensive arable field systems surrounding such sites.

*Nature of potential remains*
Roman rural settlement is represented by a variety of evidence forms. Larger settlements, such as villas, typically comprise complexes of stone-built structures in association with enclosures and fields defined by post-built or stone boundaries. Such sites are often accompanied by rich material culture assemblages, including a diverse range of pottery styles, metalwork, and building material (tesserae/roof tile/ceramic building material).

Lower-status rural settlements may comprise modest stone structures, timber-built roundhouses and associated structures. Such settlements can be extensive, forming small 'village' settlements, and Roman rural settlements are typically surrounded by networks of fields and trackways. Palaeoenvironmental evidence from Roman rural settlements can be especially useful in identiftying the economic basis of sites (SWARF Research Aim 22), as well as identifying any potential economic specialisation that may have occurred at settlement sites. Usually pottery and coins will allow dating as well as phasing of the settlement.

*How they might be detected*
Aerial survey has proved to be a useful initial survey technique in identifying Roman rural settlement sites. Field walking is a further viable survey technique, primarily due to the high occurance of pottery in the vicinity of settlement sites. Surface collection of ploughed sites and the careful plotting of finds might be informative, but such assemblages are a sign the site is already being degraded. Geophysical survey might identify potential below ground remains, especially boundary and field ditches, and walls.

The above techniques need to be followed by intrusive works to provide accurate dating. Scientific dating techniques and detailed palaeoenvironmental studies should be employed alongside excavations to provide greater detail regarding site phasing and economic activities.

*Application in aggregate extraction*
In the event of an area of proposed aggregate extraction incorporating a putative Roman rural settlement it would be appropriate to implement a staged strategy for investigations. The identification of the site should be followed by detailed geophysical survey. The results of the survey would provide an indication of the extent of the settlement and any associated features such as field systems or trackways, and could be used to inform intrusive archaeological investigation. Excavations within the site are likely to identify a range of domestic deposits, and should ideally be supported by a rigorous palaeoenvionmental sampling strategy. Such a strategy could potentially contribute to our understanding of the non-villa rural settlement (SWARF Research Aim 29), the 'Romanisation' of plant and animal use (SWARF Research Aim 41), and the transition to (SWARF Research Aim 22) and from (SWARF Research Aim 10E) Romano-British settlement forms.

### *Early medieval*

7.9 Early medieval sites are well represented within the Sharp Sand and Gravel ACA, particularly with reference to settlement evidence in the Upper Thames Valley recorded during works associated with quarrying. The low levels recorded within the Soft Sand and Crushed Rock ACAs may reflect a genuine focus of activity elsewhere on the river valleys. However, a lower level of intrusive archaeological works may also be a factor. Particular areas of useful future research include the following items.

40. Investigate groupings of British names (Eagles 2001, 210). Apparent groups of British names occur across Wiltshire, further investigation may provide information on settlement patterns in the early medieval period.

41. Refine our understanding of Middle Saxon settlement forms through the use of scientific dating. Sunken features buildings and post-built halls of 'earthfast-post construction' are often considered to be of early Anglo-Saxon date. However work at Yarnton, Oxfordshire, has demonstrated continuation of the technique into the 8th and 9th centuries and additional work may demonstrate a similar situation at other sites (Booth *et al* 2007, 104).

42. Identify 'British' settlement activity in the early medieval period. Recognition of early medieval settlement activity is often reliant on the presence of distinctive Anglo-Saxon building types such as sunken featured buildings or halls. Timber buildings, the predominant structural form of this period, generally survive poorly in the archaeological record leading to a lack of evidence. Identifying early medieval settlement in other forms, for example in the later phases of Romano-British sites, is likely to be reliant on the use of scientific dating techniques.

43. Investigate the theory that structures, such as timber halls, formerly identified as primarily domestic may have different functions in different contexts. The very low level of finds associated with Anglo-Saxon buildings at Cotswold Community may indicate that the structures were used for livestock or grain storage rather than as dwellings (Dodd and Powell 2010, 202-204).

44. Investigate the apparent low level of cremation burials in Wiltshire and whether this reflects regional variation or a preservation bias in the archaeological record (Webster 2007b, 179, after Williams 2002).

***Medieval***

7.10 Medieval sites are recorded widely across the study area and comprise a broad range of features including motte and bailey castles, manorial sites, deserted villages and ridge and furrow earthworks. The Sharp Sand and Gravel ACA has a particularly high density of sites, while fortified sites and manorial sites focus in the west and north of the study area. It is also important to view evidence for medieval activity in a wider landscape context, as much evidence for social and economic organisation survives in today's countryside in the form of ridge and furrow earthworks, deserted settlement and field enclosures.

45. There is a need to produce a synthesis of existing data for the medieval period in Wiltshire. Information on Wiltshire is absent for the medieval chapter of SWARF (Rippon and Croft 2007). While this has been superficially addressed for the aggregate producing areas in the current document, there is arguably a need for a more detailed assessment and to consider the resource of the county as a whole (Webster 2007, Research Aim 3m).

46. There is a need to develop a greater understanding of medieval farming landscapes (SWARF 2007, Research Aim 42), especially through the utilisation of palaeo-environmental analysis. Our understanding of medieval pasture agriculture is particularly inadequate, and would benefit from further attention. The extant remains of medieval arable agriculture (i.e. ridge and furrow) are relatively common landscape features, although often poorly understood. A beneficial research aim would be to comprehensively map surviving areas of ridge and furrow earthworks within the county. In some other counties, such as Northamptonshire, it has been found that while ridge and furrow earthworks have often been ploughed away, headlands can sometimes still be detected as earthworks, even if only slight. The recognition of these vestiges of the former open-field systems is a desirable aim, and may easily be carried out in fairly superficial field examinations such as site inspections as part of desk-based assessments. In areas where open-fields were lacking, field enclosures may date from the medieval period, sometimes defined by hedgerows.

47. Investigate the extent and chronology of late medieval agricultural contraction within the study area. This can be conducted through the synthesis of existing excavation data and the targeted investigation of further deserted settlement sites, utilising scientific dating techniques. Through this research any potential spatial and chronological foci of late medieval desertion may be revealed.

48. Refine our understanding of medieval fortification, and the interaction between fortified sites and domestic settlement sites.

49. Investigate the currently undated earthworks at Highworth Circle in the Thames Valley AS-A. These unusual earthworks have been variously interpreted as medieval agricultural enclosures or prehistoric ceremonial monuments, and any opportunity to investigate these features should be encouraged so as to determine date and function.

50. Medieval industrial activity, in the form of gravel extraction, has been suggested in the Thames Valley AS-A. These medieval industrial features are perhaps most

at risk, primarily due to their location within viable gravel deposits. Investigations into these gravel extraction sites would further our knowledge of the medieval economic landscape, which is limited at present (SWARF 2007, 38n).

**Strategy: Interpreting the medieval agricultural landscape**

*The resource*
The medieval agricultural landscape is relatively poorly understood (SWARF Research Aim 42), and although associated features are recorded (such as deserted settlements, manors, warrens and mills, and more commonly pits and ridge and furrow), the organisation of the agricultural landscape is not clear.

Ridge and furrow earthworks largely survive by chance, following the late medieval contraction of arable agriculture and transition to livestock-dominated forms of agriculture. Pasture forms of agriculture are particularly poorly understood and are not well-presented in the archaeological record.

*Nature of potential remains*
Open fields dominated the medieval agricultural landscape, and ridge and furrow is the most common form of evidence relating to these open fields. Open field systems were utilised by the plough teams, often using oxen for traction, although the intricacies of the system are poorly understood. These occasionally survive as extant ridges, formed by long, curving banks. More often they are identified as sub-surface furrows, the associated ridge having been removed by subsequent (often modern) forms of agriculture.

Pasture agriculture was also practiced, especially on the uplands, but generally leaves less visible forms of evidence, such as occasional animal bone assemblages, and proxy indicators of husbandry, such as insect evidence. Occasionally medieval enclosures are also identified, although many remain undated, such as Highworth Circle.

*How they might be detected*
Historic aerial photography has proved to be especially useful in recording areas of ridge and furrow earthworks (prior to post-war agricultural intensification). However, it is important to note that the post-war period has witnessed extensive ridge and furrow loss and therefore features recorded on early aerial photographs may no longer survive. A relatively new method of identifying the current resource is the use of LIDAR data. Visual inspection of the site will also confirm the survival of ridge and furrow. These methods may be followed by geophysical survey which can detect surviving below-ground furrows and associated ditch features linked to an open field system. Evidence of pasture agriculture is generally more difficult to detect, although the analysis of plant macrofossil and insect evidence, especially from medieval settlements, would prove especially useful (SWARF Research Aim 42a).

*Application in aggregate extraction*
The identification of medieval arable agricultural activity within an aggregate extraction site may partially depend upon the survival, or previous documentation, of ridge and furrow earthworks. The identification of ridge and furrow does not necessitate large-scale excavation, although targeted (and integrated) pollen, insect and plant macrofossil sampling would provide useful information relating to the medieval environment and arable practices.

Pasture agriculture is more difficult to detect archaeologically, and would depend on the survival of associated sites, such as settlement complexes and livestock enclosures. If such features were identified then excavation and integrated sampling techniques (discussed above) would provide extremely useful information relating to medieval animal husbandry. Results should be used to confirm or challenge existing documentary sources, such as Monastic accounts.

### *Post-medieval and modern*

7.11 The post-medieval and modern periods were ones of great social and economic change and the physical expressions of these changes are widespread. They are often part of the present day environment and have not always been recognized as part of the heritage. It is often the case that preservation/conservation of monuments/sites of this period can only be successfully achieved if a suitable use for the asset can be found. It has been noted that collection of data for the period post-1500 was not consistently approached and was accorded a low priority in the design and construction of the Wiltshire SMR.

51. Creating a database of information for this period adequate for the purpose of management and research must itself be the first and basic aim, and is addressed under HER enhancement. Standing buildings, in particular, are only obliquely addressed via the statutory listings and these are partial records with different aims and origins.

52. Changes in land use, such as enclosure, are often known about from historical sources (Roberts and Wrathmell 2002, fig. 5.1). There is an opportunity by studying settlements and settlement patterns in combination with historical sources to better understand the changes in settlement type and distribution consequent upon such land use changes.

53. Improved agricultural techniques and mechanisation have had an impact on land exploitation patterns, for example field enclosure and watermeadow creation, and on farms, cottages and farm buildings. It should be possible to use the physical remains to understand in more detail the changes in people's lives in their social, domestic and working arrangements. Changes in farm buildings may reflect wider changes in the local and national economy and how these effected local changes.

54. An issue for further research is to what extent the growth of mid 19th-century watercress farming might have utilised redundant water meadow systems.

55. In the later part of the period there were considerable movements in population due to industrialization, even in such a rural county as Wiltshire. The work opportunities of the canals, turnpikes and railways were legion and had considerable effects on the built and engineered environment. The improvement in health and sanitation in mid19th-century towns, and the provision of energy services (gas and electricity) has left a considerable but fast diminishing industrial heritage. This has only been partly exploited in recent times, e.g. at Salisbury (Watts 1972), and remains largely untouched by archaeological research. Studies of electricity and water pumping substations in rural areas are another area where a basic record would be a good start.

56. Studies of provision of housing, especially at poorer levels of society, at first within and later beyond, urban limits are only so far limited in the county. Cottages, courts, terraces and tenements have all been lost without study in this period, although groups such as the Wiltshire Building Record and Vernacular Architecture Group are active in this regard.

57. Little work has been done on the fabric of Workhouses and Almshouses. Most studies are documentary and genealogical. Where they survive with anything like original features the opportunity should be taken to study them. However, few, if any, will be threatened by aggregates-winning.

58. Much has been done in recording the remains of 20th-century military installations, and it is likely that the Defence of Britain project has captured the great majority of such remains (still listed in the NMR rather than the Wiltshire HER). A research aim not addressed would be the impact of such militarization of large parts of the county on towns and villages, physically and economically. The relative fossilization of rural landscapes in training areas is now well known. Massive but short-lived training camps of the First World War such as those around Fovant and Codford have left nothing visible behind, but are likely to contain much buried information (Webster (ed). 2008, 251). Limited fieldwork in conjunction with historical/cartographic research would be an obvious way of approaching these remains. Salisbury Plain, is well-studied although the emphasis here is often on the much earlier periods.

**Strategy: Understanding the history of a mill site**

*Resource*

An originally water-powered cloth mill last used in 1995, but containing buildings from at least 1820 (typical of sites in the west of the county) at threat from aggregates quarrying. While the general history of milling in the county is known, few mill sites have been thoroughly investigated, above and below ground, with a view to establishing a full archaeological record, as standing buildings are frequently converted to new uses rather than demolished.

*Nature of potential remains*

A mill in recent use will contain a variety of buildings dating from many different periods of its existence, although structures from before 1800 are rare. The buildings will contain machinery, or indications of its former existence, watercourses and holding ponds or lodges and other elements of water management may pass under them, or around them, and there would be likely to be a dam or weir with sluices. The water management features may spread some distance out from the mill and contain many relict features of earlier systems. There may be worker's accommodation in or near the complex, although this is rare: more likely for an older mill is the clothier's or mill manager's house. There will be a great number of multi-period buildings showing a variety of relict features indicative of earlier uses.

*How they might be detected*

The mere existence of a recent mill site will be obvious. To understand the wider extent of the site that may require investigation, documentary and map research will be an essential preliminary. Aerial photographs should be consulted and a field survey and possibly geophysical/remote surveys of the area around the mill as well as within its working area should be implemented. An assessment of its particular historical, archaeological and buildings potential will be produced to inform excavation and recording strategies.

*Application in aggregate extraction*

After the historic research has been assessed an evaluation programme would target suspected demolished buildings and investigate the below ground archaeology of existing ones. The standing buildings would be recorded and their structural history investigated, with a view to understanding date and function and changes over time. The results of the geophysical surveys and historical research would be used to design a series of excavations and detailed surveys to record and interpret the use and history of water courses and related structures. Waterlogged deposits are obviously likely in a water mill and environmental samples could be used to ask site-specific and wider local questions. Carbon 14 dating and dendrochronogy would be useful for older structures, especially any that were suspected of predating documentary records. These may well apply to structures earlier than the post-medieval, but buildings of all periods up he eh date of abandonment should be appropriately recorded, as the 20th century use of such sites should not be neglected.

**Research Strategy**

7.12 In addition to the period-specific research goals, detailed above, a number of wider areas for potential research have been identified. These include:

59. Expand the NMP to cover the whole of Wiltshire and Swindon, especially the aggregate areas of the study area.

60. HER enhancement, namely: digitising data for archaeological events; facilitating sophisticated querying of HER data by transferring the dataset from AutoCAD to a GIS format; address the underrepresentation of post-medieval and modern sites.

61. Further investigate undated sites and monuments.

62. Systematic field walking within aggregate areas.

63. LIDAR analysis.

64. Reappraisal of existing data.

65. Completion of county-wide Historic Landscape Characterisation

66. Assess the effectiveness of archaeological evaluation

67. Synthesize existing excavation data into a single database, ideally within GIS, and assess the resource across Local Authority boundaries

***The National Mapping Programme***

7.13 Areas within Wiltshire already covered by the National Mapping Programme include the Thames Valley, Avebury World Heritage Site, Stonehenge World Heritage Site, Salisbury Plain Training Area, and Lambourn Downs. The Resource Assessment has highlighted the potential to extend the coverage to cover all of Wiltshire and Swindon.

***HER enhancement***

7.14 At the time of producing this report, the Wiltshire HER used AutoCad and associated databases for the storage, interrogation and presentation of HER records. Converting the HER to a GIS format would make it easier to share the data with third parties (due to the prevalence of GIS software), and it would also facilitate the integration of Historic Landscape Characterisation data (Sarah MacLean, pers. comm). Wiltshire HER migrated to GIS software in July 2011.

7.15 There is a recognised low level of post-medieval and modern sites on the HER. Traditionally the HER has focused on sites pre-dating 1500 AD. Research identifying post-medieval and modern sites of interest in the county could address this bias.

***Undated sites***

7.16 The majority of sites recorded on the WHER within the study are of ‘uncertain’ date. Upon analysing this data it became apparent that the majority of these uncertain sites relate to barrow earthworks and ring ditches, which for the purpose of this study, were assumed to be Bronze Age in date but certainly require further research.

7.17 However, a significant number of (non-barrow/ring ditch) sites remained that would benefit from further research. Often these sites had been identified from aerial survey as cropmarks or parchmarks and require field survey or intrusive works to substantiate their archaeological nature, and determine their date and purpose.

***Systematic fieldwalking***

7.18 A programme of high level but systematic fieldwalking within the study area, especially the AS-As which currently have low site densities (Stour AS-A, Test Tributaries AS-A) might go some way to ascertaining whether certain gaps in our knowledge are the result of a lack of research focus.

7.19 In specific cases, it may help to confirm Bronze Age activity (in the form of diagnostic worked flints) in the vicinity of currently undated barrow earthworks and cropmark ring ditches. It may also locate assemblages of late prehistoric/Romano-British pottery in the vicinity of currently undated earthwork enclosures and outside of hillfort sites.

***LIDAR analysis***

7.20 Aerial LIDAR survey is a technique which uses a laser to digitally map the land surface by measuring the distance between a survey aircraft and the ground at regular intervals. The results are particularly useful in archaeological terms as they record earthwork features of potential archaeological significance. It is also possible to 'filter out' vegetation to reveal, for example, earthworks within areas of forest. LIDAR is also able to identify subtle features, not visible on aerial photographs, which makes it a powerful prospecting tool. LIDAR survey could usefully be used in conjunction with aerial photographic sources to further assess the archaeological resource of the study area, and can even record new features in already well studied areas (Bewley *et al* 2005). In particular, this technique has proven useful in identifying and mapping medieval landscape features, such as ridge and furrow and deserted medieval settlement (see medieval research strategy).

***Reappraisal of existing data***

7.21 The county has a long tradition of antiquarian investigations (especially 18th and 19th century) which would benefit from reappraisal. Although the reports produced by these works have often dated badly, the finds from these excavations are still frequently available for study and further research would allow this data to be incorporated into modern interpretative frameworks. Further understudied collections held by local museums should also be incorporated into any broad reappraisal schemes.

7.22 The Portable Antiquities Scheme is playing an increasingly important role, as shown by the high number of Iron Age coins already recorded by the scheme within Wiltshire. This data should be integrated with the WHER, and assessed in relation to broader data sets.

7.23 Grey literature reports and fieldwork archives also require further dissemination and analysis. Although publicly accessible through the WHER it would be beneficial to make unpublished archaeological reports for the county available online. By doing so, the analysis of this data and its incorporation into existing interpretational models will be facilitated.

### *Historic Landscape Characterisation*

7.24 There is currently no comprehensive Historic Landscape Characterisation data for the county (although it has been carried out for AONB areas). The completion of a comprehensive HLC database for Wiltshire should be a research strategy priority. Such a database would provide a wider landscape context to individual sites recorded within the WHER. It would also allow a greater analysis of the historic landscape, especially the development and survival of the medieval and post-medieval agricultural landscape.

### *Effectiveness of archaeological evaluation*

7.25 Since the inception of PPG16 in 1990, replaced by PPS5 in 2010, planning advice and permissions prior to aggregate extraction have generally required a detailed, and staged, level of archaeological assessment. A 'typical' staged approach has comprised production of an initial desk-based assessment, geophysical survey, and archaeological trial trenches as pre-determination information-gathering surveys, followed by a strip, map and sample of the entire proposed extraction area as a conditional requirement, either as a further level of archaeological survey or as a mitigatory 'watching brief'. Given the emphasis of this staged approach to archaeology with regard to minerals extraction, an assessment of the effectiveness/value of archaeological evaluation techniques would be very useful.

7.26 One potential way to achieve this would be to identify a site which underwent this full set of staged assessment works, a 'typical' aggregates extraction site', and to examine the results of each of the assessment stages. By comparing the results of each stage as indicators of the archaeological resource (including evidence for the extent, form, survival and, crucially, significance of archaeological remains) an approximate 'success rate' for the staged works works could be obtained. Such a study would be particularly useful in determining the effectiveness of evaluation trenching, as a major form of archaeological survey in terms of both time and cost, as a form of archaeological prospection.

### *Synthesis of the archaeological resource across Local Authority boundaries*

7.27 An issue raised during the discussion following the project Seminar was the artifical nature of the study area utilised within county-based aggregate assessments. This is especially noticeable within Wiltshire, where only a small part of the Thames Valley resource is recorded within the county. This creates a distorted assessment of the resource, primarily because only a small part of the resource is assessed in isolation.

7.28 This could be addressed through an assessment that considered the aggregate resource according to geological extent, rather than on a county-by-county basis. For instance, the aggregate resource (and associated archaeological resource) for the whole of the Thames Valley could be analysed within a single assessment. In support of this, it would be beneficial to consolidate the results of all existing archaeological works relating to aggregate extraction in the Thames Valley, and assess this resource regardless of Local Authority boundaries.

## 8. CONCLUSIONS

8.1 In Wiltshire aggregates are currently produced from sharp sand and gravel deposits in the Upper Thames Valley. Future extraction of sharp sand and gravel is likely to

focus on the Thames Valley in the short term, with potential areas for extraction associated with the Bristol Avon and the Salisbury Avon identified. Reserves associated with the Kennet and the tributaries of the Stour and the Test may also be a potential future source of sharp sand and gravel. Soft sand is currently produced from deposits in the north-western area of the county, in the vicinity of Calne, and in the south-eastern area of the county. Future extraction is likely to focus on these areas, although potential sources are also present in the south-western and central-eastern area of the county. Crushed rock aggregates have recently been produced in the north-western area of the county, although it is not anticipated that any additional sites exploiting this resource will be allocated in the short or medium term.

8.2 The potential aggregate resource of the UD is divided into three Aggregate Character Areas: the Sharp Sand and Gravel ACA, the Soft Sand ACA, and the Crushed Rock ACA. The Sharp Sand and Gravel ACA is sub-divided into six Aggregate Sub-Areas, based on River Valleys, namely the Thames Valley AS-A, the Bristol Avon AS-A, the Kennet AS-A, the Salisbury Avon AS-A, the Stour Tributaries AS-A and the Test Tributaries AS-A. The Soft Sand ACA is divided into four Aggregate Sub-Areas on the basis of geology and geographical area: the North-West AS-A, the South-West AS-A (focused on Upper Greensand), the South-East AS-A, and the Central-East AS-A.

8.3 The density of sites recorded on the WHER is generally lower within the ACAs than the county as a whole, with the exception of the Sharp Sand and Gravel ACA for the early medieval, medieval and post-medieval periods and the Soft Sand ACA for the Mesolithic period. This may reflect the generally higher level of Prehistoric activity outside the ACAs, particularly the prehistoric ceremonial landscapes found on the chalk uplands of Marlborough Downs and Salisbury Plain.

8.4 The Palaeolithic and Mesolithic are generally represented by a low number of stray finds found across the study area, although nearby sites such as Harnham have highlighted the fact that in situ early prehistoric material may still occur within the aggregate resource. Thus continued careful assessment, mitigation and monitoring are still key to identifying such sites (which are of such rarity that one well-preserved site may be of very high significance in its potential contribution to our knowledge of the period). Elements of highly significant Neolithic monumental complexes such as Avebury, Stonehenge and Marden lie within the study area, although investigations prior to aggregate extraction have also identified Neolithic ritual monuments beyond these well-documented landscapes.

8.5 Bronze Age sites are the most prolific prehistoric monuments within the study area, primarily because of the widespread distribution of barrows and ring-ditches. Archaeological investigations prior to aggregate extraction in the major river valleys, particularly the Thames, have identified whole landscapes of Late Bronze Age and Iron Age date. Excavations at Cotswold Community and Latton Lands, for example, identified multi-phase evidence for both domestic settlement and associated field systems. Cropmark evidence suggests such landscapes survive in numerous locations across the river valleys in the study area, and future aggregate extraction has the potential to contribute highly to our knowledge of settlement in this period.

8.6 There were no Roman *civitas* capitals or *coloniae* in Wiltshire, although several small towns lie within the study area and there is a large amount of evidence for rural settlement. Beyond the river valleys, particularly the higher ground in the north-west of the study area, numerous villa settlements have been identified. In the river valleys there is evidence for Roman intensifcation of the agricultural landscape, comprising widespead field enclosure and drainage ditches, including areas of

previously marginal land. Evidence from sites such as Latton Lands indicate that large areas of Roman, and earlier, landscapes may potentially be masked by later deposits of post-Roman alluvium.

8.7 As with other regions, there is generally little evidence for early medieval settlement although where recorded this has come from existing villages or through archaeological excavation in rural contexts. Settlement patterns were consolidated in the medieval period and this is commonly reflected in current landscapes within the study area, where deserted medieval settlements are recorded along with evidence for former open field agriculture.

8.8 Remains from the post-medieval and modern periods are widespread and well-preserved within the study area, with many more surviving types of evidence than preceding periods. This includes elements of the infrastructure, such as canals, railways and turnpikes, which are still in use today as well as a vast number of buildings. This evidence is generally well documented and often survives as extant features today, and particularly significant examples may comprise designated heritage assets. It became clear during the project that the WHER contains a lower number of post-medieval and modern 'sites' than would be expected. This appears to be simply related to the fact that many features from these periods have not been classified to date as heritage assets.

8.9 An important result of archaeological investigations upon the aggregate producing areas, especially with regard to prehistoric studies, has been the realisation that sites may not always contain the remains that archaeologists expect from the existing evidence base. For example, excavations at Cotswold Community in the western reaches of the Upper Thames Valley identified a potential, previously unsuspected, Neolithic timber circle within the better-recorded later prehistoric and Romano-British landscape. Such unexpected finds can provide essential information for areas of prehistoric studies for which there is currently little evidence to interpret. This is related to a wider point that since the inception of PPG16 in 1990 evaluations and excavations upon the aggregates resource have produced some of the most consistently informative results in the county. Through the stripping and archaeological monitoring and recording of large areas inherent in aggregate extraction our understanding of prehistoric settlement patterns and landscape use has been transformed.

8.10 Seven sites without adequate dissemination have been identified. These include ongoing or recently completed works, which might be expected to receive adequate publication in the future, and works undertaken in the 1970s.

8.11 This assessment has completed the objectives detailed in section 1.3, with the exception of Objectives 7 and 8. A seminar will now be held to fulfil the requirement of Objective 7. The assessment was unable to inform the Minerals Development Framework to the degree anticipated, as documents were adopted prior to the completion of this study. A number of key research aims have been identified by the study, which would be of great benefit to the study and preservation of the archaeological resource of the aggregates areas for the coming years.

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**APPENDIX A: AGGREGATES DATABASE FIELDS**

1. National ID
1. Project ID
3. Name of project
4. Region
5. County
6. Valley system
7. Name(s) of quarry(ies)
8. Aggregate deposit type
9. Grid reference easting (world co-ordinates)
10. Grid reference northing (world co-ordinates)
11. HER/SMR location
12. HER/SMR number
13. Scheduled Monument number
14. Listed building, battlefield or garden numbers
15. Funding body
16. Archaeological organisation undertaking the work
17. Year or year range of intervention
18. Period 1-4
19. Size of project
20. Nature of fieldwork (primary)
21. Site code Fieldwork (secondary)
22. Nature of fieldwork (secondary)
23. Site code Fieldwork (secondary)
24. Fieldwork required by regulatory conditions
25-40. Archaeological period
25a-40a. Site type class
41. Nature of discoveries
42. Current project status
43. Most recent project stage
44. Archive location known/unknown
45. Archive details
46. Published references
47. Significance of data retrieved from project
48. Dissemination complete
49. Suggested level of dissemination
50-59. Proposed further work
60. Associated projects

**APPENDIX B: WHER PERIOD**

| WHER Period | Date |
|---|---|
| PREHISTORIC (all periods) 500,000 BC to 43 AD | 250,000 BC to 42 AD |
| PALAEOLITHIC (500,000 BC to 10,000 BC) | 250,000 BC to 8,000 BC |
| MESOLITHIC (10,000 BC to 4,000 BC) | 8,000 BC to 4,000 BC |
| NEOLITHIC (4,000 BC to 2,200 BC) | 4,000 BC to 2,500 BC |
| BRONZE AGE (2,600 BC to 700 BC) | 2,500 BC to 800 BC |
| IRON AGE (800 BC to 43 AD) | 800 BC to 42 AD |
| ROMAN (43 AD to 410 AD) | 43 AD to 410 AD |
| EARLY MEDIEVAL (410 AD to 1066 AD) | 410 AD to 1066 AD |
| MEDIEVAL (1066 AD to 1540 AD) | Later Medieval -1066 AD to 1600 AD |
| POST-MEDIEVAL (1540 AD to 1901 AD) | 1600 AD to 1900 AD |
| 20th CENTURY | Recent - 1900 onwards |
| 21st CENTURY | - |
| UNCERTAIN | |

**APPENDIX C: WHER METHODOLOGY**

Information provided by Sarah MacLean, Swindon and Wiltshire HER Development Officer

Wiltshire and Swindon HER is currently held in AutoCAD format. Using GIS shapefiles provided by Cotswold Archaeology, an initial check of which map squares intersected with the study area was made.

A search was then made on the SMR core table of the Wiltshire HER (the table which contains all monument records) based on the list of map tiles generated from the initial check.

The data for the relevant sites was then copied into an Excel spreadsheet where several fields were then removed. These are as follows:-
NMR Number - not often used and only covers 30% of sites at present. Unable to guarantee accuracy of data.
Accession Number - Museums Accession number where known. Only 0.1% of records have this data.
Specific Date - Less than 1% of records have this data. Period field used instead.
Condition - For many sites the data was collected in the 1950s/60s/70s and so may be out of date
Condition Date - not required if Condition field not included
Landuse - See notes on Condition above
Landuse Date - See notes on Condition Date above
Flag1 - a field used for flagging records for exporting as word documents
Description - a shorter, simplified description of the site. Full details are stored in the Comments field[‡].
Compiler - Only completed for 11.4% of records and so not useful for this project
townflag - An earlier version of flag1 field.
EUS Number - Not complete for all EUS related records so decision was made not to include this data. Also project is unlikely to cover EUS areas.
Not on web - a tick box used for indicating if a record is too sensitive to be put on the online HER.

The records were then checked and all unlocated sites removed from the list. These are usually identified by the U prefix to the number in the HER Number e.g. ST92U01. As these sites usually have no grid references they cannot be plotted and are therefore of reduced value for this project. They also tend to refer to find spots which for this project have limited value for most periods.

Any records with 0 values in X and Y coordinate fields had relevant grid reference data added.

[‡] This field was subsequently requested from the HER and added to the GIS data layer.

**APPENDIX D: SITES PROPOSED FOR ALLOCATION IN THE AGGREGATE MINERALS SITE ALLOCATIONS DEVELOPMENT PLAN DOCUMENT**

The MPA provided a GIS layer of sixty-six potential aggregate sites as well as the *Initial Site Options Report* issued August 2010 (WCC & SBC 2010). The potential sits are located in five Mineral Resource Zones the Upper Thames Valley, The Calne Area, South East of Salisbury and the Bristol Avon.

GIS layers of designated sites, namely World Heritage Sites, Scheduled Monuments, Listed buildings, Registered Parks and Gardens and Registered Battlefields, were searched for intersection with proposed aggregate sites. The results are detailed below with reference to the site code detailed in WCC & SBC 2010. It was beyond the scope of this report to review intersecting sites recorded by the WHER, AMIE or PAS.

*Scheduled Monuements*
Four proposed sites contain, or partially contain a Scheduled Monument (as noted in WCC & SBC 2010):

- Upper Thames Valley Area 3, U6 includes SM WI901, Settlement NE of Eisey Field Copse;
- Upper Thames Valley Area 5, U9 includes SM WI900 Settlement SE of Latton ;
- Upper Thames Valley Area 8, U23 includes SM WI902 Settlement E of Ashtonfield (Cotswold Community); and
- Bristol Avon Area 4, BA12 crosses into SM 12036 Moated Site and Fisponds South East of Rowden Farm.

*Registered Parks and Gardens*
Two proposed sites share boundaries with Registered Parks (as noted in WCC & SBC 2010):

- Calne Area 3, C10 shares a bounday with Grade II Registered Spye Park; and
- Calne Area 4 C13 shares a boundary with Grade I Registered Bowood Park.

*Listed Buildings*
One proposed site contains a Listed building:

- Upper Thames Valley Area 6 U16 includes Lb_UID 317867, Leigh All Saints Old Chancel, Grade II*.

Information on identified Scheduled Monuments and Registered Parks and Gardens had already been included in the Initial Site Options Report (WCC & SBC 2010). The report also identified the need for “Assessment of historical significance of structure (‘The Chancel’) located within site” as a key issue. This study identified this as the Grade II* Listed building Leigh All Saints Old Chancel and passed this information on to the MPA. No other designated sites were identified within the proposed areas.

**APPENDIX E: SEMINAR TIMETABLE AND ATTENDANCE LIST**

**Archaeological Resource Assessment of the Aggregate Producing Areas of Swindon and Wiltshire**

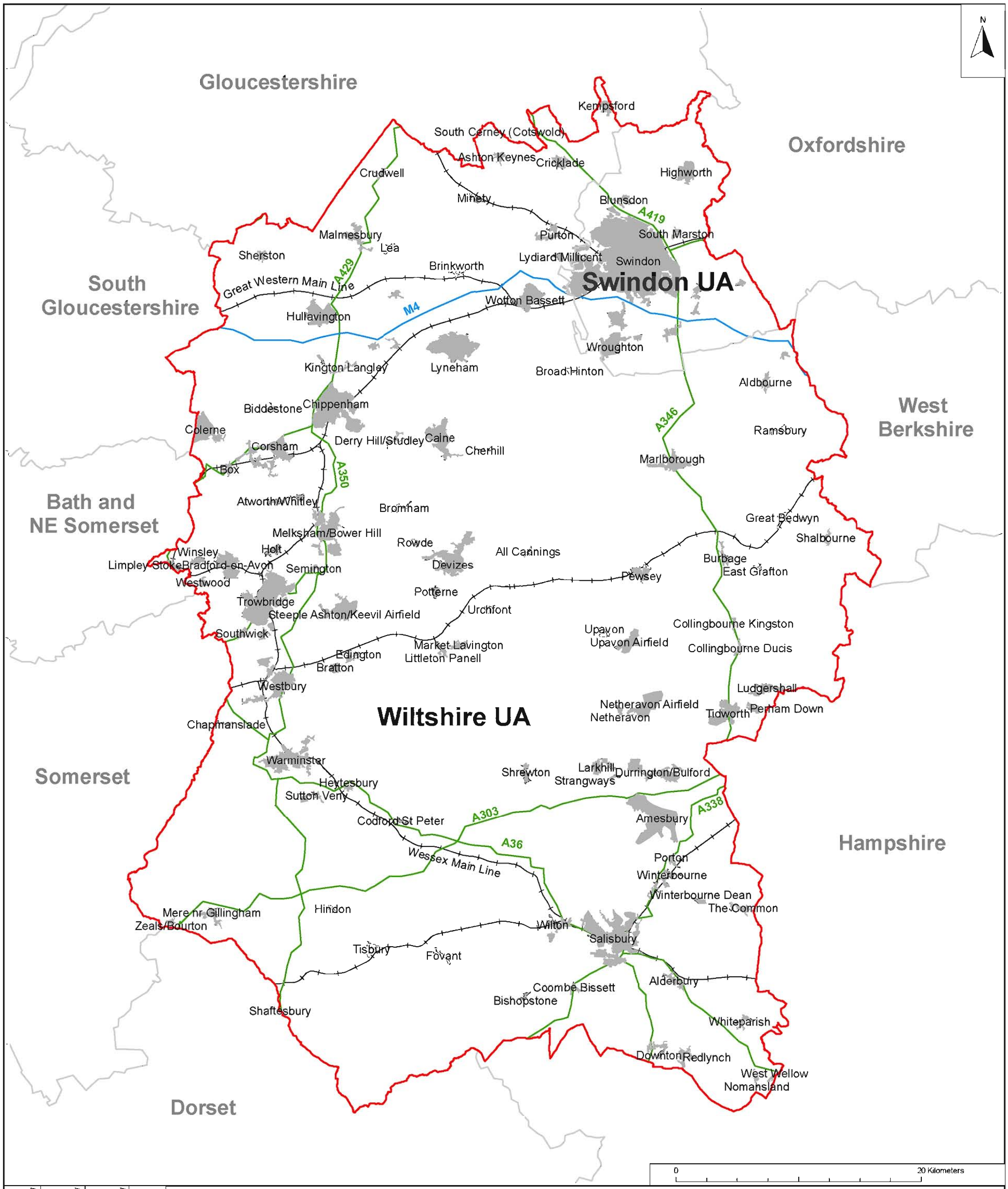
Wednesday 22 June, Wiltshire and Swindon History Centre

| | |
|---|---|
| 10:30-11:00 | **Arrival** |
| 11:00-11:10 | ***Welcome*** |
| | Melanie Pomeroy-Kellinger, Wiltshire Council and Richard Morton, CA |
| 11:10-11:45 | ***Project background and results*** |
| | Nathan Blick and Richard Morton, CA |
| 11:45-12:00 | ***Archaeological investigations at Down Ampney*** |
| | Richard Young, CA |
| 12:00-12:30 | ***Archaeological investigations at Cotswold Community Centre*** |
| | Dr Alex Smith, OA |
| 12:30-1:00 | ***Archaeological investigations at Eysey Manor Farm*** |
| | Steve Ford, TVAS |
| 1:00-1:40 | **Lunch** |
| 1:40-2:10 | ***Minerals extraction and archaeology: impact of ALSF funding*** |
| | Jon Humble, EH |
| 2:10-2:20 | ***Wiltshire Council Minerals Planning Policy*** |
| | Mark Henderson, Wiltshire Council |
| 2:20-2:30 | ***Summary of key points*** |
| | Melanie Pomeroy-Kellinger, Wiltshire Council |
| 2:30-3:00 | ***Discussion*** |
| | Chair: Neil Holbrook |

ALSF: Aggregates Levy Sustainability Fund
CA: Cotswold Archaeology
EH: English Heritage
OA: Oxford Archaeology
TVAS: Thames Valley Archaeological Services

Attendees

| Invitee | Company/organisation |
|---|---|
| Alex Smith | Oxford Archaeology |
| Steve Ford | Thames Valley Archaeological Services |
| Clive Waddington | Archaeological Research Services |
| Melanie Pomeroy-Kellinger | Wiltshire Council |
| David Vaughn | Wiltshire Council |
| Sarah MacLean | Wiltshire Council |
| Clare King | Wiltshire Council |
| John Price | Wiltshire Council |
| Mari Webster | Wiltshire Council |
| Brad Fleet | Wiltshire Council |
| Mark Henderson | Wiltshire Council |
| David Rose | Wiltshire Council |
| Greg Lester | Wiltshire Council |
| Duncan Coe | West Berkshire Archaeology Service |
| Tom Cromwell | English Heritage |
| Vanessa Straker | English Heritage |
| Roger Thomas | English Heritage |
| Jonathan Last | English Heritage |
| Jon Humble | English Heritage |
| Hugh Beamish | English Heritage |
| John Samways | Cricklade Historical Society |
| Neil Holbrook | Cotswold Archaeology |
| Richard Morton | Cotswold Archaeology |
| Richard Young | Cotswold Archaeology |
| Nathan Blick | Cotswold Archaeology |
| Rosey Blackwell | Cotswold Archaeology |
| Rachel Leung | Cotswold Archaeology |
| Chris Jordan | Cotswold Archaeology |
| Peter Davenport | Cotswold Archaeology |




Wiltshire

Unitary Authority Boundary

Urban Areas

Motorway

Major A Road

Railways

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
**Wiltshire**

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 1 |

N

River Thames

Southern Cotswolds

Bristol Avon

River Kennet

Marlborough Downs

The Avon Vale

Vale of Pewsey

Salisbury Plain

River Wylye

Salisbury Avon

River Bourne

West Wiltshire Downs

River Nadder

Vale of Wardour

River Ebble

Salisbury Avon

Cranbourne Chase

0 20 Kilometers

Wiltshire

Unitary Authority Boundary

Elevation (meters AOD)

| | | | |
|---|---|---|---|
| 0 | 90 | 160 | 230 |
| 30 | 100 | 170 | 240 |
| 40 | 110 | 180 | 250 |
| 50 | 120 | 190 | 260 |
| 60 | 130 | 200 | 270 |
| 70 | 140 | 210 | 280 |
| 80 | 150 | 220 | 290 |

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Topography

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 2 |

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N

Thames Valley Quarries (Fig. 4)

Knockdown

Widleys Gorse

Seagry/
Great Somerford

High Penn Farm

Freeth Farm

Sands Farm
Complex

Compton Bassett

Kilima Farm

Nethermore Sand Pit

Lacock

Sahara
Sand Pit

Piggledean

Hardings Sand Pits

Steeple Langford

Old Hurdcott

Peters Finger

Alderbury
Borrowy Pit

Alderbury Sand

Whaddon

Bedwell Park

Blaxwell Farm

Broxmore Park

Brickworth

Bushey Copse

White
Farm

Lower Pensworth

Giles Lane

Rye Hill Copse

Broomhill

Pound Bottom

0 18 Kilometers

Wiltshire
Unitary Authority Boundary
Urban Areas

Status
Active quarry
Ceased quarry
Dormant quarry
Refused/ Withdrawn
/ Not Active quarry

Preferred Area: Permitted
Preferred Area: Undeveloped
Potential Aggregate Site (MPA)
Mineral Resource Zones

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Known and Potential
Aggregate Extraction Sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB/LG | 1:300,000 @A3 | 3066 | 3 |

N

Barnground
Cotswold Community
North End Works
Spratsgate Lane
Wickwater Farm
Kent End Farm Complex
Manor Farm Complex
Cleveland Farm Complex
Rixon Gate
Rixon Farm
Upper Waterhay
Sandpool Farm
Cottage Lake
Swillbrook Bridge
Mallard Lake
Shades Farm
Swans Lane Bridge

Preferred Area 6
Preferred Area 1
Latton Lands
Roundhouse Farm (Preferred Area 5)
Preferred Area 3
Eysey Manor Farm (Preferred Area 2)
Preferred Area 4

0
2 Kilometers

Wiltshire
Unitary Authority Boundary
Urban Area

Status
Active quarry
Ceased quarry
Dormant quarry
Urban Area
Refused/ Withdrawn / Not Active quarry
Preferred Area: Permitted
Preferred Area: Undeveloped
Potential Aggregate Site (MPA)
Mineral Resource Zones

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Thames Valley Quarries

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| LG/RB | 1:50,000 @A3 | 3066 | 4 |

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N

Thames

Kennet

Bristol Avon

Salisbury Avon

Bourne

Test Tributaries

Salisbury Avon

Ebble

Nadder

Wylye

Stoure Tributaries

0

20 Kilometers

Wiltshire

Unitary Authority Boundary

Alluvium

River Terrace Deposits

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COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Aggregate Resource: Drift Geology

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 5 |

N

0

20 Kilometers

Wiltshire
Unitary Authority Boundary
Limestone
Hazelbury Bryan Formation
Lower Greensand
Upper Greensand
Reading Beds
Lambeth Group
Bagshot Beds/ Bracklesham Group

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COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Aggregate Resource: Solid Geology

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 6 |

N

0

18 Kilometers

Wiltshire
Unitary Authority Boundary
Sharp Sand and Gravel ACA
Soft Sand ACA
Crushed Rock ACA

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COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Aggregate Character Areas

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 7 |

N

0 20 Kilometers

Soft Sand ACA:
- North West AS-A
- South West AS-A
- Central East AS-A
- South East AS-A

Sharp Sand and Gravel ACA:
- Thames Valley AS-A
- Kennet AS-A
- Bristol Avon AS-A
- Salisbury Avon AS-A
- Stoure Tributaries AS-A
- Test Tributaries AS-A

For Crushed Rock see Fig. 7

Wiltshire

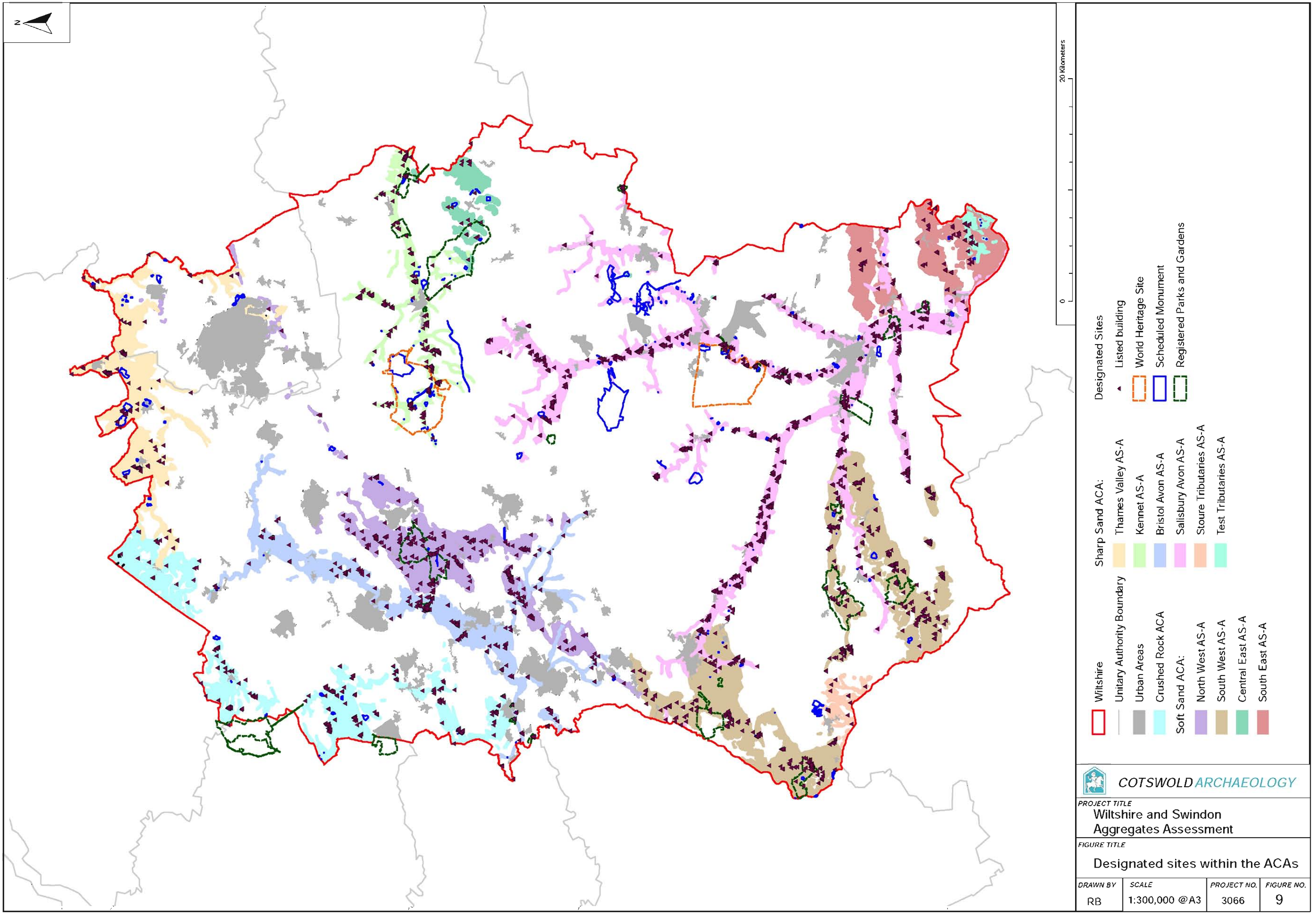
Unitary Authority Boundary

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Aggregate Sub-Areas

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| LG/RB | 1:300,000 @A3 | 3066 | 8 |




COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Designated sites within the ACAs

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 9 |

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N

Brook Farm

Seagry

Sutton Bengar

Ashlade Firs

Farleigh Down

Wilton Common

Salisbury Bypass

Dinton Brickworks

Compton Park

Fir Hill

Horse Shoe Copse

Harnham

Lodge

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

**Soft Sand ACA:**
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

**Sharp Sand ACA:**
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

▲ Flint flake(s)
Hand axe(s)

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
**Palaeolithic**

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 10 |

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N

Coates Water Park
Peckingell
Freeth Farm
Littlecote Park
Elcot
Whaddon
Chittoe
SU15NW050
Bishopstow
Countess Roundabout
Tower Road
Bapton Water Meadow
Bourne Valley
Hurdcott House
Donhead St Mary
Rowberry Farm
Windwhistle
Ludwell
Tannery House

0 20 Kilometers

Wiltshire
Unitary Authority Boundary
Urban Areas
Crushed Rock ACA
Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A
Sharp Sands ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A
Single find
Multiple finds
Flint working site
Macehead/axe/adze
Possible in situ remains

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Mesolithic

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 11 |

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N

Cotswold Community
Highworth Circles
Down Ampney
Eysey
Giants Cave barrows
Fox Covert
Fir Clump
West Knighton
Showell Nurseries
Bowood Park
Temple Bottom
Avebury
Devil's Den
Silbury Hill
Clatford
Beckhampton Road
Kennet enclosures
Lockeridge
Marden
1516704
Wilsford House
Tilshead
Southleigh Wood
Durrington Walls
Sherrington
SU14SE110
The Avenue
AMIE 219639
Netherampton
Windwhistle
Matrimony Farm

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Monumental mound
Henge monument
Circular enclosure
Long Barrow
Settlement
Standing stone(s)
Linear feature
Burial
Industrial site
Pit(s)
Causewayed enclosure
Mortuary enclosure

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Neolithic sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 12 |

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N

New Covert

The Ham

Enford Bridge

Castle Ditches

Ferne House

Donhead St Mary

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stoure Tributaries AS-A
Test Tributaries AS-A

Pottery
Arrowhead
Multiple flints
Single flint
Polished axe(s)

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Neolithic finds

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 13 |

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N

Latton
Cotswold School
Showell Nurseries
Temple Farm
Harepit Way
St John's School
Tottenham House
Old Ditch
Brigmerston Down Ditch
Milston Down
Syrencot
Boreham Farm
Grim's Ditch
Winterbourne Gunner
Netherhampton
Charlton Plant

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Burial
Burnt Mound
Settlement
Industrial site
Ditch/field boundary
Pit(s)/post hole(s)
Enclosure
Earthwork

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Bronze Age features

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 14 |

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N

Kempsford

Eysey

Hampton Hill

Moor Leaze Farm

New Road Bridge

Spye Hill

Salisbury Hoard

East Grimstead

The Clift

Bemerton Hoard

Antsey Hollow

Bishopstone

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Lithic
Bone
Ceramic
Metalwork(ing)

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Bronze Age finds

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 15 |

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N

Latton
Marston Maisey
Court Farm
Lake Covert
Great Somerford
Dodford Farm
Hatt House
Bear Farm
Bromham
Jugs Graves
Berryfield
Avebury barrows
Fox Covert
Manton
Saddle Ride
Wood Bridge
Snail Down
Sunnyhill Down
Gallows Barrow
Goat Woods
Brigmerston
Barrow Clump
Scudamore
Winterbourne Stoke
Sutton Veny
Amesbury Barrows
Jacks Castle
Newmead Farm
Golden Barrow
Barrow Street Lane
Landford Common

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Ring ditch/barrow(s)

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Bronze Age barrows

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 16 |

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N

Wetstone Bridge
Down Ampney
Round House
Cotswold Community
Latton
Marston Meysey
Eysey
Rixon Gate
Cleveland
Malmesbury
Guy's Rift
Showell
Bury Wood Camp
Werg
Nash Hill
Chisbury Camp
Forest Hill farm
Tottenham House
Combe Down
Heywood
Milston
Sidbury Camp
Vespasian's Camp
Southmill Hill
Park Hill
Salisbury Hoard
Ashleys Copse
Wick Ball Camp
Ebsbury
Kenwalch's Castle
Pen Pits
Castle Ditches
Little Woodbury
Castle Rings
Castle Copse

0 20 Kilometers

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Iron Age

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 17 |

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Quarry
Find(s)
Burial/cemetery
Settlement/enclosure
Hillfort
Ditch/field boundary
Pit(s)

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N

Latton Lands
Ashton Keynes
Duroconovium
Ermin Street
Easton Gray
Fosse Way
Nettleton Shrub
Littlecote
Cunetio
Silbury Hill
Tottenham Park
Verlucio
Warleigh
Great Bedwyn
Wellhead
The Ham
Pit Meads
The Portway
Sorviodunum

0 20 Kilometers

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
**Roman settlement and roads**

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 18 |

- Wiltshire
- Urban Areas
- Unitary Authority Boundary
- Crushed Rock ACA

**Soft Sand ACA:**
- North West AS-A
- South West AS-A
- Central East AS-A
- South East AS-A

**Sharp Sand ACA:**
- **Thames Valley AS-A**
- **Kennet AS-A**
- **Bristol Avon AS-A**
- **Salisbury Avon AS-A**
- **Stour Tributaries AS-A**
- **Test Tributaries AS-A**

- Villa
- Town
- Rural settlement/enclosure
- Ditch
- Pit(s)
- Trackway
- Road

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N

Vancelettes Farm

Nettleton Shrub

Cunetio

Silbury Hill

Savernake

Collingbourne Ducis

Purton

Figheldean

Eyewell Farm

Penn Pits

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Temple
Burial/cemetery
Industrial site
Quarry

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Roman religion and industry

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 19 |

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N

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Ceramic/tesserae/building material
Metalwork
Coin(s)
Hoard

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Roman finds

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 20 |

N

Cotswold Community
Latton Lands
SU19NE400
Cricklade
SU09SW402
Cleveland Farm
Malmesbury
Battle of Sherston
644921
SU17SE609
Littlecote Roman Villa
Hazelbury
655112
SU06NE402
SU16NW406
East Wansdyke
Cadley
West Chisenbury
SU15SE400
Compton Farm
SU14SE412
Amesbury
ST93NE401
Wilton
Penn Pits
Battle of Wilton
217645
ST92NE404
Broad Chalk
Matrimony Farm

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Settlement (excavated features)
Recorded Late Saxon Settlement
Cemetery/burial
Ecclesiastical site
Find(s) (recorded by WHER)
Industrial Site
East Wansdyke
Battle

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Early Medieval

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | | 21 |

N

0

20 Kilometers

WHER site

Sharp Sand and Gravel ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA
Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Medieval: all WHER sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 22 |

N

SU03NE452

Old Wardour Castle

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand and Gravel ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Motte and Bailey/Ringwork
Fortified Manor House
Moated site
Deer park
Rabbit warren
Fishpond
Dovecote
Manor House

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Medieval: Castles and Manorial Sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 23 |

N

Lacock

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand and Gravel ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Shrunken/deserted settment
Other settlement
Town

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Medieval settlement

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 24 |

N

Bentley Wood

Preceptory

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand and Gravel ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Preceptory
Bishops Palace
Abbey/Priory
Church
Chapel
Cross
Hospital
Hermitage

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Medieval: Ecclesiastical Sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 25 |

N

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand and Gravel ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stoure Tributaries AS-A
Test Tributaries AS-A

Mill
Pottery production site
Gravel pit
Quarry
Iron extraction/working site

0 20 Kilometers

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Medieval: Industrial Sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 26 |

N

Cricklade

Sherston

Bowood

Littlecote

Lacock

Warminster

Longleat

Horningsham

Amesbury Abbey Park

Stockton Park

Trafalgar House

Stourhead

Wilton Park

Old Wardour Castle

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

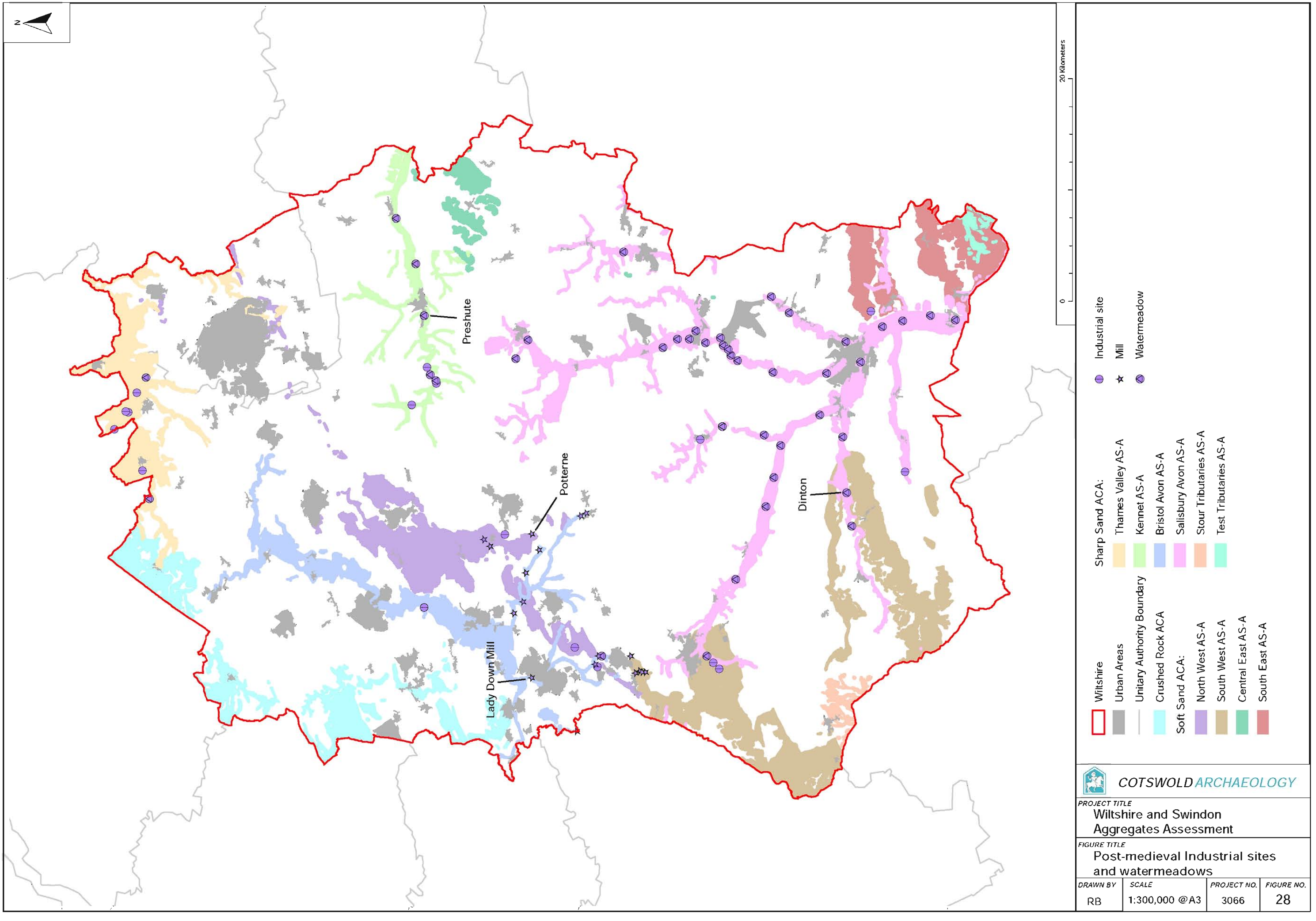
Model farm
Settlement/farm
Bridge
Cemetery/burial
Historic parkland/garden
Ecclesiastical site
Fortified site/moated site
Ditch/boundary
Pillow mound
Find(s)

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
Post-Medieval Structures
and earthworks

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 27 |

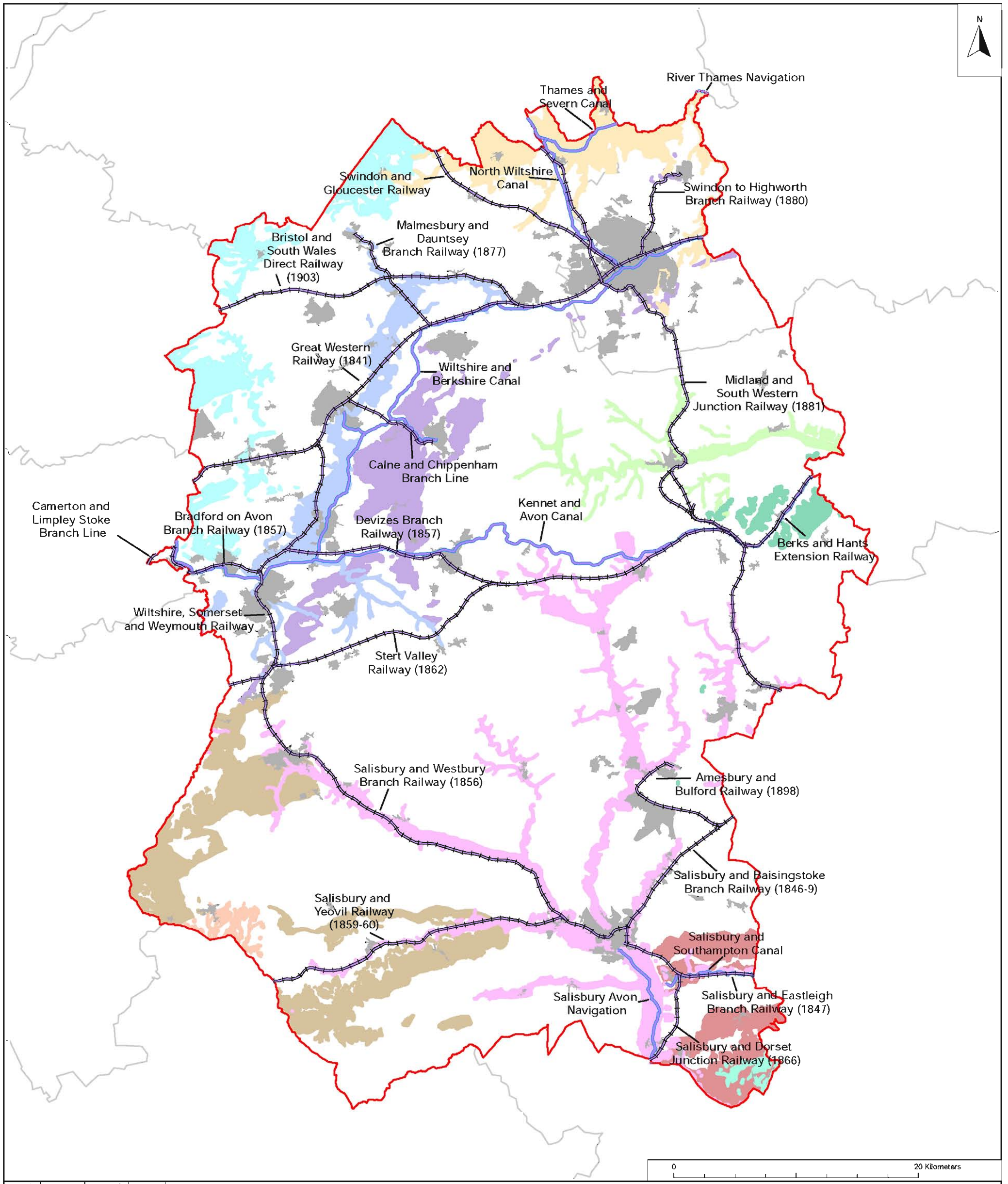



COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Post-medieval Industrial sites and watermeadows

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 28 |




COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Post-Medieval Canals and Railways

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| RB | 1:300,000 @A3 | 3066 | 29 |

- Wiltshire
- Urban Areas
- Unitary Authority Boundary
- Crushed Rock ACA

Soft Sand ACA:
- North West AS-A
- South West AS-A
- Central East AS-A
- South East AS-A

Sharp Sand ACA:
- Thames Valley AS-A
- Kennet AS-A
- Bristol Avon AS-A
- Salisbury Avon AS-A
- Stour Tributaries AS-A
- Test Tributaries AS-A

- Railway
- Navigation or Canal

P:\PROJECT FOLDER\Illustration\Drafts\GIS\01 Projects

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N

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

EWEXE (East Wessex)
CCTSV (Cotswold Scarp and Vale)
CWEXW (West Wessex)

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon
Aggregates Assessment

FIGURE TITLE
19th century landscape provinces
(after Roberts and Wrathmell 2002)

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 30 |

N

Blakehill Farm airfield

Lyneham

Hartham Park

Yatesbury Airfield

Oare

Iford Manor

Netheravon

Tilshead Airborne Camp

Heale House

Shute House

Reddish House

0 20 Kilometers

Wiltshire
Urban Areas
Unitary Authority Boundary
Crushed Rock ACA

Soft Sand ACA:
North West AS-A
South West AS-A
Central East AS-A
South East AS-A

Sharp Sand ACA:
Thames Valley AS-A
Kennet AS-A
Bristol Avon AS-A
Salisbury Avon AS-A
Stour Tributaries AS-A
Test Tributaries AS-A

Memorial
Building
Cemetery
Ceremonial circle
Historic park/garden
Industrial site
Military feature
Standing stones
Trackway
Unassociated finds

COTSWOLD ARCHAEOLOGY

PROJECT TITLE
Wiltshire and Swindon Aggregates Assessment

FIGURE TITLE
Modern sites

| DRAWN BY | SCALE | PROJECT NO. | FIGURE NO. |
|---|---|---|---|
| NB | 1:300,000 @A3 | 3066 | 31 |