

UPLANDS INITIATIVE FIELD PROJECTS 2002-3

Ruabon Mountain Survey Area

North Wales

Archaeological Survey Report



Oxford Archaeology North

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SUMMARY

An archaeological identification survey of the Ruabon Mountain area of North Wales (SJ 240 460 centred) was undertaken in June 2002. The work was undertaken by Oxford Archaeology North (OA North) on behalf of the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as part of the Uplands Initiative. The fieldwork consisted of an identification survey to identify, locate and describe archaeological and historical features within the defined survey area.

The Ruabon study area incorporates Historic Landscape 40 (Countryside Council for Wales 2003), and part of the study area has been previously surveyed by Clywd Powys Archaeological Trust. The OA North 2002 survey area comprised c32 sqkm, encompassing enclosed and improved agricultural land as well as large open tracts of heather moorland. The study area is a major massif edged by substantial limestone crags; it is bounded to the north by Minera, to the east by the communities of Pen-y-Cae and Esclusham, and to the west by the Llandegla Plantation and the community of Llantysillio.

The majority of the area is unimproved moorland which has been used as a grouse moor for the last two hundred years allowing for the survival of predominantly heather ground cover, which overlies peat deposits. The extent of the peat cover means that early archaeological remains are for the most part around the edges of the study area, where there are only limited peat deposits, whereas post-medieval remains are scattered over the whole study area. The earliest remains identified by the survey were funerary round cairns that typically date from the Bronze Age and were for the most part to be found on the limestone crags.

With the exception of a single hafod structure, which may have medieval origins, the post-prehistoric sites are all of post-medieval date and relate to pastoral agricultural activity, lime burning and lead working. The lead working is focussed within the northernmost part of the study area, and was part of a major nineteenth century North Wales lead industry, which had declined and finally closed in 1914. The lead working landscapes included shafts, processing areas, a smelter near New Brighton, and a communications infrastructure which linked the individual sites.

A total of 140 new sites were identified in addition to 76 sites already known. The new sites included 16 cairns, 9 farmsteads, 1 hafod, 14 field boundaries, 6 limekilns, over 25 post-medieval quarries, 16 trackways and 23 mine shafts. There is a need for further recording of the Bronze Age funerary monuments and the important lead mining and processing landscapes on the northern side of the study area.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Oxford Archaeology North (OA North) was invited to undertake an archaeological identification survey of the Ruabon Mountain area (SJ 240 460 centred) of North Wales on behalf of the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as part of the Uplands Initiative.

1.2 OBJECTIVES

- 1.2.1 The objectives of the project were:
 - to promote a wider and deeper understanding of upland areas and their role in Welsh history, in accordance with the aims of the Uplands Initiative
 - to provide an accurate Level 1 survey of all identified monuments (OA North 2002a).
- 1.2.2 To achieve these objectives the study area was subject to a desk-based assessment and walk-over survey. The desk-based study, carried out in April / May 2002, consisted of a search of both published and unpublished records held by the National Monuments Record of Wales, Clywd-Powys Archaeological Trust and the library and archives at OA North's offices in Lancaster. The field work was carried out at different times of the year to fit in with access availability; it was undertaken during June and October 2002, with a final phase in February 2003.
- 1.2.3 This report sets out the results of the work, accompanied by a summary gazetteer of new sites (*Appendix 1*).

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by OA North in response to a request for archaeological surveys of extensive areas of the Welsh Uplands, and was designed to meet the requirements of a brief by RCAHMW. The project design provided for an initial archaeological desk-based study, followed by a field identification survey for four survey areas: Mynydd Hiraethog, Clwydian Range, Ruabon Mountain and Eglwyseg, and North Berwyn and Ceiriog. Of these surveys all but the Clwydian Range area were commissioned to be carried out by OA North, and the present report relates to the Ruabon Mountain area only (Figs 1 and 2). An additional area to the immediate east of the original Mynydd Hiraethog area was also commissioned but this is the subject of a separate report. In all other respects the work has been carried out in accordance with the project design.

2.2 DESK-BASED SURVEY

- 2.2.1 *National Monuments Record (NMR):* an assessment was made of data held by the RCAHMW, Aberystwyth, which was overlain onto digital 1:10,000 mapping for the study area.
- 2.2.2 **Sites and Monuments Record (SMR):** an assessment was made of data held by the Clywd–Powys Archaeological Trust (CPAT), which was also overlain onto the digital base map for the area.
- 2.2.3 *Aerial Photographs:* aerial photography from the NMR office was also consulted, and information relating to possible new sites was annotated onto the field walking maps.
- 2.2.4 *Ordnance Survey Mapping:* first and/or second edition mapping was available for the entire survey area, and was examined for indications of historic sites not previously represented on the NMR and SMR.
- 2.2.5 **World Wide Web:** parish records, census data and transcripts of some public records were obtained from archives and local histories on the internet. More modern data on the parish was also gleaned, which provided information about recent developments in the area.

2.3 IDENTIFICATION SURVEY

2.3.1 An identification survey to Level 1 (OA North 2002a) was undertaken across the Ruabon Mountain study area. The identification survey represents the minimum standard of record for field investigation, and is aimed at the discovery of previously unrecorded sites. Its objective is to record the existence, location, and extent of any archaeological site. The emphasis of the record lies on the written description, which, in this instance, includes comment on character and condition, and sites have been graded in terms of condition and archaeological significance. Sites already identified within the study area by the NMR and SMR were checked and recorded at the same level of consistency as the newly discovered sites. The whole survey area, including both the unenclosed and partially enclosed land in

- the southern and western parts, was examined. The survey aimed to identify, locate and record archaeological sites and features on the ground and involved four elements: reconnaissance, mapping, description and photography.
- 2.3.2 Each area was walked in transects of between 20m and 50m, depending on local topography and ground cover. The archaeological detail was mapped using Leica differential GPS equipment, which used post-processed corrections from a base station to achieve an accuracy of ±0.25m. The digital survey data was transferred, via DXF file format, into a CAD system (AutoCAD14), and was then superimposed onto the digital base map (Fig 3). The descriptive records were input on-site into a database on a Psion portable palm computer; the more complex sites were also sketched onto paper *pro-forma* sheets. A photographic record of the sites was maintained in 35mm black and white print format, colour slides, and also using digital colour photography; the digital photographs were used to accompany the present report.

2.4 GAZETTEER OF SITES

2.4.1 All of the information concerning archaeological sites within the assessed area was collated into a gazetteer (*Appendix 1*), which provides details of their location, period, and character. Locations are given as eight-figure National Grid References where possible, and the position of each site is indicated on Fig 3.

2.5 ARCHIVE

2.5.1 A full archive has been produced to a professional standard in accordance with current English Heritage guidelines (1991) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The archive is provided in the English Heritage Centre for Archaeology format, both as a printed document and digitally. A synopsis, including the index to the archive and a copy of the report, will be placed in the National Monuments Record, RCAHMW at Aberystwyth and the Clywd-Powys Sites and Monuments Record, CPAT, Welshpool.

3. TOPOGRAPHICAL AND HISTORICAL BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

- 3.1.1 The area of Ruabon Mountain (SJ 240 460 centred) is situated to the north of the Vale of Llangollen in north-east Wales (Fig 1). The area extends to the plateau of Minera to the north, to the east it is bounded by the communities of Pen-y-Cae and Esclusham, and to the west by the Llandegla Plantation and the community of Llantysillio. It is a visually striking area with stark natural landforms such as the Eglwyseg cliffs, deep cut river valleys and undulating heather moorland rising over the Ruabon mountain itself and the Brynn-Adda Flat.
- 3.1.2 The majority of the area lies between the 200m and 500m OD contours and is broadly characterised as open heather moorland surrounded by deep river valleys and imposing cliffs, the centre of the survey area being the Ruabon Mountain and Brynn-Adda Flat, which rises to 502m OD. The lower areas to the south and east are farmland which have been enclosed and improved, whilst to the west much land has been given over to forestry plantation on the steep slopes of the Eglwyseg River valley. Streams and drains abound running down off the moors and into the lower valleys.

3.2 GEOLOGY

3.2.1 The solid geology of the study area consists mainly of carboniferous limestone, which outcrops around the edges of the massif. The soils are predominantly peats overlying Cambic stagnohumic gleys, which are waterlogged reduced mineral soils (Neville George and Smith 1961; Lawes Agricultural Trust 1982)

3.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.3.1 *Prehistoric:* there was clear evidence of human activity in the area during the prehistoric period; the moorland landscape having its origins in the upland economies of the Neolithic and Bronze Age.
- 3.3.2 Prior to the present survey, there were two sites defined as being of Neolithic date and both were find spots: a flint knife was found in the vicinity of Trevor Rocks (NPRN 156994), and part of a stone axe was found on the Eglwyseg cliffs (NPRN 157861).
- 3.3.3 The Bronze Age is well represented through the study area; these were within three broad groups each relating to a topographical setting typical for funerary monuments, being prominent exposed crags with wide vistas. There were a total of 55 sites, of which five were findspots of bronze artefacts, including two socketed spearheads found from a quarry at World's End (NPRN 156342); the remainder were monuments typical of the period: cairns, tumuli and standing stones. The largest concentration of monuments extended along the towering natural limestone outcrops of Trevor Rocks and the Eglwyseg Cliffs, located on the upper slopes and the Ruabon plateaux, the site group then extended towards World's End. A further group of sites is located within land owned by Cefn-Fedw farm, to

- the north of the Eglwyseg Plantation; unfortunately access was denied to this area during the present study, and the records could not therefore be enhanced. However, from cartographic evidence, they were seen to be a south-eastern extension of the first group.
- 3.3.4 A second group extends from World's End, across Cefn-y-Gader towards Minera. The concentration of monuments is lower in this area, in part as a result of the lead mining activity activity in recent times. Finally, a smaller grouping can be seen across the upper reaches of Cryn-y-Brain to the south of the Llandegla Plantation, in the extreme north-west of the study area.
- 3.3.5 In addition to the period specific sites there were 13 records assigned to the broad prehistoric period within the designated study area. Five of these were findspots: flint flakes were found in the area of Cefn-y-Gader (NPRN 156892), a perforated stone was found at Ty-Brith (NPRN 159965) and four flint flakes were found on the Esclusham Mountain (NPRN 156893). The remaining ten records refer to linear banks and ditches which have not been dated with any certainty; the exceptions to this are a possible enclosure on the Eglwyseg Mountain, identified by CPAT from their 1995 survey (NPRN 156344), and a cairn located in the Eglwyseg Plantation which were recorded in 1999 as badly damaged (NPRN 156379). Perhaps the most significant exception was a possible enclosure or boundary wall, again on the Eglwyseg Mountain (NPRN 151028), which was revisited during the present survey.
- 3.3.6 *Iron Age / Roman:* only one record of Iron Age activity was found close to the study area; this was Castell Dinas Bran which, being c0.5km to the south-west of Trevor Rocks, is just outside the study area. This site of a medieval stone built castle lies within the earthworks of an earlier Iron Age hillfort (Countryside Council for Wales 2003). The absence of Iron Age activity may reflect either that the monuments have not been recognised because of peat overburden, or that settlement of the period may have been confined to the lower valley areas, which have since been subject to agricultural improvement and the sculpting of the landscape by lead mining, lime burning and stone extraction industries of the nineteenth century, reducing the visibility of extant archaeology from the period.
- 3.3.7 Roman activity in the area is represented by three findspots, a small penannular broach was found in the Eglwyseg Plantation (NPRN 156386), three coins were found on Crag-y-Forwen (NPRN 171351) and a spindle whorl was found on the Esclusham Mountain (NPRN 156891).
- 3.3.8 *Medieval:* the record of medieval settlement is again both limited and uncertain. A total of 15 previously recorded sites exist within the study area, the most significant of which lay just outside the study area to the south-west, Castell Dinas Bran, a stone built medieval castle (Hewitt 1977). The castle is thought to have been built by Gruffydd ap Madoc, the son of Gruffyyd ap Madoc founder of Valle Crucis Abbey in 1201 (*ibid*).
- 3.3.10 The later medieval period is represented by the Manor House at World's End which bears a date of 1563, though the building has been altered since (NPRN 153895). The surrounding areas in the lower valley slopes to the north and south has records of enclosures, buildings now evidenced only as earthworks, ridge and furrow at World's End, a dew pond and a single hafod site at Cefn-Y-Cist (NPRN 151085). The industrial mining complex of Minera is thought to have later medieval origins (NPRN 33932). The farm buildings in the area today appear to be of early post medieval date, but the farms

- themselves may have medieval origins. A noteworthy comparison with the Mynydd Hireathog study area is that there is a general lack of the term 'Hafod' in the farm names, which may reflect a lesser occurrence of transhumance agricultural practice in the Ruabon area.
- 3.3.11 Only two farms are named hafod within or around the study area, and only three presurvey sites relate to hafod-type agricultural practices. The earthworks at Cefn-y-Cist are said to be the remains of an earlier hafod building (NPRN 151085), as are the earthfast walls at Cefn-y-Bryn (NPRN 151076). A preserved field system, found at 'Caer Hafod' (NPRN 15120), included clearance cairns, boundaries and platforms. The only other record was that of 'Hafod-y-Weddg' now a modern farm believed to have been built on the site of an earlier farmstead (NPRN 27259). Documentary research found little further evidence of the medieval period.
- 3.3.12 *Post-Medieval:* the post-medieval remains are dominated by industrial activity. The limestone outcrops of the south and west parts of the study area provided lead rich ore veins and stone sources for the mining and lime-burning industries. The whole of the area of Trevor Rocks and the Eglwyseg Cliffs is peppered with the abandoned workings, kilns and shafts of these industries. Trackways and sledways run across the slopes and lead from levelled working platforms down into the valley towards the town of Llangollen and it's river, canal, road and rail network.
- 3.3.13 Lime was used to increase pasture fertility, for whitewashing and also as a mortar for general construction. The Llangollen canal, completed in 1808, was used for the transport of lime for agricultural use as well as for bringing in coal to fire the kilns. Prior to this the steep slopes of the area would have been coppiced to provide wood for fuel (Wilson 1975). The Eglwyseg cliffs from Bryn Goleusouth to Tan-y-Castell contained six kilns only two of which have previously been recorded. The kilns themselves are prone to overgrowth and as a result most of the kilns found during this study had suffered much structural damage from root action.

4. RESULTS OF THE DESK-BASED STUDY

4.1 DESK-BASED STUDY SUMMARY

- Documentary and Cartographic Evidence: the study area has an elevated and exposed character by comparison with the surrounding topography around and consequently has seen little intensive agricultural exploitation within its documented history. In the southern part of the area there has been some intake capture of the lower marginal lands, where the garth extends around Hafod farm, which on place name evidence was a settlement that developed out of what was probably a medieval transhumant occupation. Elsewhere in this southern part of the study area, the field systems were a result of parliamentary enclosure and the land contained has not been intensively improved, and has had only low intensity pastoral land use. To the north there has been very little agricultural exploitation of the area but there is considerable documentary evidence for industrial extraction, which has had a considerable, albeit localised, impact on the landscape. The OS first edition map (1878) shows the extensive remains of a lead extraction industry in the area of the Lower Park Mines, which contains the evidence for mines, leats, flues and chimneys, lead processing floors, reservoirs and engine houses. Nearby to the south-west was the Pool Park Mine complex which was primarily extractive, and around New Brighton to the north-east was a further complex of mining and processing, including the only lead smelter for the area (Williams 1986). Mining in the area dates back to at least the eighteenth century, but many of these were disparate concerns and much of the production had declined by the early nineteenth century. In 1849 the mines were united into the Minera Mining company; they were intensively worked and proved to be very profitable. Production declined in the early twentieth century, however, and the last mine closed in 1914 (Lewis 1967).
- 4.1.2 Clwyd Powys Sites and Monuments Record (SMR), National Monuments record of Wales (NMR): in total, 356 sites were identified between the SMR and NMR, 13 Prehistoric, two Neolithic, 55 Bronze Age, 15 medieval, 253 post-medieval and eight of unknown date (Fig 3). Digital air photo mapping was supplied by the RCAHMW under the auspices of the Uplands Initiative, any information relating to potential sites was transcribed onto the field walking maplets.

5. SURVEY RESULTS

5.1 Introduction

- 5.1.1 The study area incorporated 35 sqkm of enclosed and unenclosed land and the survey examined both known and previously unknown sites which ranged in date from the prehistoric to the post-medieval periods. Some of these were individual monuments, such as a single cairn or sheepfold but many were part of larger groups, particularly industrial features, which have been combined into a single record because of obvious relationships between them. All the sites identified by the documentary study were examined, their locations and extent were updated where required on the mapping and the site descriptions were enhanced. Both new and old sites are indicated on Figure 3.
- 5.1.2 *Previously Recorded Sites:* the desk based study identified 356 sites between the SMR and MNR, of which 13 records were updated. The great majority of the known sites were confirmed by the identification survey but a small number, despite extensive searching, could not be located.
- 5.1.3 *New Sites:* in total, 140 new sites were identified from the general prehistoric, Bronze Age and post-medieval periods. These are summarised below in Table 1 showing substantial numerical increases in the sites within the study area.

| Period | Pre-Survey | Post-Survey | Numerical |
|---------------------|------------|-------------|-----------|
| | Number | Number | Increase |
| Neolithic | 2 | 2 | |
| Bronze Age | 54 | 61 | 7 |
| General Prehistoric | 13 | 18 | 5 |
| Medieval | 15 | 15 | 1 |
| Post- Medieval | 254 | 370 | 115 |
| Unknown Date | 13 | 25 | 12 |
| Multi-Period | 2 | 2 | |
| Total | 356 | 496 | 140 |

Table 1: Pre and Post Survey Site Numbers

5.1.4 *Altitude range of sites:* the overall site density was 14.17 sites per km², which was spread according to altitude as shown in Table 2. The greatest density of sites occurs within the 400-500m OD range.

| Height range | Existing sites | New Sites | Total |
|--------------|----------------|-----------|-------|
| 175-199m | | 2 | 2 |
| 200-224m | | 3 | 3 |
| 225-249m | | 5 | 5 |
| 250-274m | 5 | 4 | 9 |
| 275-299m | 3 | 7 | 10 |
| 300-324m | 16 | 22 | 38 |
| 325-349m | 10 | 17 | 27 |
| 350-374m | 34 | 9 | 43 |
| 375-399m | 45 | 18 | 63 |

| 400-424m | 68 | 19 | 87 |
|----------|-----|-----|-----|
| 425-449m | 69 | 15 | 84 |
| 450-474m | 57 | 11 | 68 |
| 475-499m | 43 | 2 | 45 |
| 500-524m | 6 | 3 | 9 |
| 525-549m | | 1 | 1 |
| 550-574m | | | |
| 575-599 | | 2 | 2 |
| Total | 356 | 140 | 496 |

Table 2: Pre and post survey site numbers with respect to altitude

5.1.5 *Range of site types:* the sites identified from the present survey, and previously identified within the record fall into 99 types, which are defined as shown in Table 3.

| Type | Existing Sites | New Sites | Total |
|---|-----------------------|-----------|-------|
| Barn | 1 | | 1 |
| Boiler House | 1 | | 1 |
| Boundary Bank | 2 | 10 | 12 |
| Boundary Cairn | 1 | | 1 |
| Boundary Stone | 3 | 2 | 5 |
| Bridge / Footbridge | 1 | | 1 |
| Building / Farm Building/ Field Barn / | 25 | 6 | 31 |
| Outbuilding | | | |
| Building Platform / House Platform / Platform | 11 | 1 | 12 |
| Buddle | 2 | | 2 |
| Cairn / Clearance Cairn | 2 | 16 | 18 |
| Chapel | 1 | | 1 |
| Chimney | 3 | | 3 |
| Church | 1 | | 1 |
| Coal Shed | 2 | | 2 |
| Clock Tower | | 1 | 1 |
| County House Garden | 1 | | 1 |
| Cross | 1 | | 1 |
| Crushing Mill | 1 | | 1 |
| Culvert | 1 | | 1 |
| Dam | 1 | | 1 |
| Dewpond | 1 | | 1 |
| Drainage Work | 1 | | 1 |
| Drove Road | | 1 | 1 |
| Dwelling | 3 | | 3 |
| Earthworks | | 5 | 5 |
| Enclosure | 8 | | 8 |
| Engine House | 9 | | 9 |
| Excavation | 2 | | 2 |
| Farmstead / Farmhouse / Farmyard | 1 | 9 | 10 |
| Field System / Field Boundaries | 5 | 4 | 9 |
| Find | 13 | | 13 |
| Fold | 1 | | 1 |
| Ford | | 1 | 1 |
| Gateway | 1 | | 1 |
| Hafod | 2 | 1 | 3 |

| Hollow | 1 | | 1 |
|--|----------|----|----|
| Horse Whim | 3 | | 3 |
| House | 17 | 2 | 19 |
| Hushing Channel | 1 | 2 | 1 |
| Hushing Pond | 2 | | 2 |
| Hut | 1 | | 1 |
| Hut Circle | 1 | | 1 |
| Inn | 1 | | 1 |
| Inscribed Stone/ Marker Stone / Standing | 5 | | 1 |
| Stone/ Stone Row | 3 | | 1 |
| Iron Works | 1 | | 1 |
| Kiln | 2 | | 2 |
| Lime Kiln | 6 | 6 | 12 |
| Lead mine | 6 | | 6 |
| Leat | 11 | 1 | 12 |
| Lime Working | 1 | 1 | 1 |
| Linear Earthworks | 3 | | 3 |
| Lodge | <i>J</i> | 1 | 1 |
| Marker | | 1 | 1 |
| Mine | 70 | 3 | 73 |
| Mill | 1 | 3 | 1 |
| Monument | 1 | | 1 |
| Mound | 1 | 1 | 1 |
| Non Antiquity | 3 | 1 | 3 |
| Ore Bin | 1 | | 1 |
| Platform | 11 | 1 | 12 |
| Pond | 4 | 1 | 5 |
| Powder Store | 4 | 1 | 1 |
| Power Station | 2 | 1 | 2 |
| | 5 | 25 | 30 |
| Quarry | | 25 | |
| Rain Gauge Reservoir | 3 | 1 | 4 |
| | 3 | 1 | 3 |
| Ridge and Furrow | | | |
| Ring Cairn | 1 | | 1 |
| Round Barrow | 44 | 1 | 44 |
| School House | | 1 | 1 |
| Searchlight Battery | | 1 | 1 |
| Settlement | 3 | 22 | 3 |
| Shaft / Shafts | - | 23 | 23 |
| Sheep fold | 3 | 1 | 4 |
| Sheep Shelter | 1 | | 1 |
| Shelter | 4 | | 4 |
| Shooting Butt | 14 | 6 | 20 |
| Smithy | 1 | | 1 |
| Spoil heap | 1 | | 1 |
| Spring | 1 | | 1 |
| Stone Circle | 1 | | 1 |
| Survey | 2 | | 2 |
| Trackway | 8 | 5 | 13 |
| Tramway | 2 | | 2 |
| Triangulation Point | 1 | | 1 |
| Wall | 4 | 3 | 7 |

| Water Channel | | 1 | 1 |
|---------------|-----|-----|-----|
| Water Course | | 11 | 1 |
| Wheel Pit | 1 | | 1 |
| Winch | 1 | | 1 |
| Works | 1 | | 1 |
| Total | 356 | 140 | 496 |

Table 3: Range of Site Types

5.2 PREHISTORIC

- 5.2.1 There was plentiful evidence of prehistoric activity within the environs of the study area, which mainly comprised funerary cairns, field systems, boundaries and possible settlement remains. The earliest recorded evidence were the Neolithic findspots (NRPN 157861, and 156994), but there was also a series of features broadly attributed to the prehistoric period and the plentiful funerary monuments of the Bronze Age, which virtually encircle the open moorland of Bryn-Adda and the Ruabon mountain. The majority of these sites and monuments are highly visible in the landscape they occupy, and it was therefore not surprising, in an area of such stark natural landforms, that few previously unrecorded sites were encountered.
- 5.2.2 Bronze Age: six new sites were added which were attributed a Bronze Age date, and include a small, probably clearance, cairn located on the Ruabon Mountain (NPRN 269169). Across the brow of Cryn-Brain, two cairns were shown on the current mapping but had not previously been recorded with the SMR or NMR; one was located opposite the compound of the television transmitter south of Sir Watkins Tower (NPRN 269152), and comprised a large cairn at least 8m in diameter and standing to a maximum height of 1.3m. The centre of the cairn had been robbed out, revealing an internal cist like structure, which was much denuded. A substantial amount of the stone around the eastern (facing the sunrise) edges of the cairn was found to be naturally bonded to quartz. This is a common feature of funerary monuments intended to reflect the light and enhance their visibility in the landscape by standing apart from the natural landforms (Bradley 2000, 92) and would reinforce the interpretation of this as a funerary cairn. A second cairn (NPRN 269153) situated to the west, was much more denuded than the above and had become much overgrown with heather. The cairn stands to a maximum of 1.0m high and had a diameter of 7m, and again there was evidence of a central funerary structure which appears to have been robbed out.
- 5.2.3 Approximately half a kilometre down slope towards a building known as 'Faraway', a very dilapidated cairn was discovered in the sharp gorge cut by the watercourse flowing across slope, out of the now Llandegla plantation (NPRN 269155). This cairn was 5m in diameter and had been badly damaged by a rough exploratory slot cut through what was almost certainly a central structure. Despite its poor condition, it is evident that this was a funerary monument.
- 5.2.4 The last new site added to the record of Bronze Age monuments was a funerary cairn (NPRN 269127) located on the slopes to the west of the Aber Sychnant. This was 7m in diameter, 0.6m high with a central depression 0.65m deep. The cairn was overgrown with

- dense heather and difficult to see from a distance, but upon inspection it was found to also have the partial remains of a circular bank surrounding the cairn.
- 5.2.5 *General Prehistory:* only five newly recorded sites were attributed to a broad prehistoric date. Of these, three sites comprised four small, probably clearance, cairns located across Bryn-Adda (NPRN 269082 (two adjacent cairns), 269081, 269086). They were small irregular ovoid features, which stand to no more than 0.3m in height, and were all roughly 2m in diameter. There was no evidence on the cairn's surfaces of any internal structural elements suggesting a cist component. The terrain around these features is one of thin peaty soil cover with a high proportion of naturally outcropping stone, and there was no evidence of intensive land clearance.
- 5.2.6 Two cairns found in the Eglwyseg Plantation (NPRN 269071, 269072) were located on the craggy plateau above the farm of Dinbren-Uchaf, within an area already containing several Bronze Age funerary monuments. The first (NPRN 269071) is 6m in diameter and relatively prominent while the other (NPRN 269072) is relatively small, having a diameter of 2m. Both of the sites were in a poor state of preservation and the centres of each appeared to have been disturbed.
- 5.2.7 Several previous records from the prehistoric and Bronze Age periods were enhanced as a result of the survey. In the area of the Pool Park lead mines was a possible enclosure or linear stone bank (NPRN 104356), which has been attributed to the prehistoric period. On investigation it was found to be a stone bank, in places 2m wide, which stood as an intermittent row of stones. The bank ran roughly north/south for 35m before it reached a cairn (NPRN 151029), which was 5m in diameter with a central depression. Although difficult to determine due to their partially earthfast condition, they appeared to be of the same build and potentially contemporary. At a distance of 3m beyond this cairn a second cairn, 3m long by 2m wide, could be seen clearly; from the side of this cairn was a second stretch of stone bank which continued north for 30m. These features are consistent with linear stone clearance.
- 5.2.8 The northern part of the study area has much stone near the surface which may have masked further possible prehistoric features. The area is a heavily industrialised zone of the Minera Plateau, and many features may have been destroyed by mining. It is also possible that the concentration of study on the historic industry of the area may have overshadowed the possibility for their being higher survival of prehistoric monuments within this pock-marked landscape of lead extraction.
- 5.2.9 A large earthfast cairn was excavated in 1890 (NPRN 156338), and contained burnt bone, a flint arrowhead and a horse's tooth. The mound is still a prominent earthfast tumulus with a central depression as a result of the antiquarian intervention; it is adjacent to the Offa's Dyke Footpath, and has been eroded by pedestrian traffic straying off the designated pathway.
- 5.2.10 Several of the funerary monuments located on the Eglyseg Mountain were found to be in poor condition. NPRN 156322 was found to be the very dilapidated remains of a once substantial cairn, visible now as loose piles of stone and low denuded banks. NPRN 156319 is again the remains of a large cairn (10m diameter), evidenced mainly by an area of loosely piled stone and retains only some elements of its original form. It does, however, have the remnants of a kerb. Immediately north of this site is NPRN 156318, a

- second substantial round cairn, 14m in diameter, which is in a slightly better state of preservation but is nevertheless degraded.
- 5.2.11 A triangulation point, shown on the current OS mapping on the western edge of Bryn-Adda, was found to be on the much dilapidated and altered remains of a substantial Bronze Age ring cairn (NPRN 269171). The remains consist of a low, mostly earthfast, mound 12-13m in diameter with the possible remains of a ring ditch and bank. A triangulation point has been inserted into the central area of the remains and a small shelter has been created using stone robbed from the western part of the site.
- 5.2.12 In the area of the Esclusham mountain is another triangulation point shown on the current mapping at the junction of two boundaries, in the area of the Pool Park Lead Mines. This was again found to be on a very badly preserved cairn with evidence of a ditch and bank. The previous record suggested that the site had lost its resemblance to a prehistoric monument, which is not strictly true, but it has suffered from being re-used for both a triangulation point and as a platform for a jubilee bonfire (NPRN 155357). It's prominence in the landscape, prior to this damage, was clearly attested to by the fact that it had been utilised as a visible landmark for the definition of parish boundaries.

5.3 MEDIEVAL

5.3.1 This survey's most significant discovery from the central upland area was perhaps the remains of a well built and substantial hafod building (NPRN 269167), which comprised a two celled structure, one being a farm house, the other seemingly a barn or byre. The building was described by the present owner of Tyddyn-Uchaf farm as being disused old sheep pens, but went on to say that it was formerly the hafod of his farm. The practice of transhumant farming was most prevalent during the medieval period, during which most hafods had their origins. The present structure has clearly been subject to rebuilding work in the post-medieval period, but probably also had medieval origins

5.4 POST-MEDIEVAL

- 5.4.1 In total, 117 sites have been ascribed to the post-medieval period, and form the majority of the sites. However, there is some uncertainty in determining dates, particularly between later medieval and the post-medieval, purely on the basis of the physical evidence, particularly when agricultural settlement patterns and industrial technologies have not undergone substantial change until relatively recent times.
- 5.4.2 The expansion of agricultural activity and the enclosing of fields throughout the region during the eighteenth and nineteenth centuries, increased the demand for limestone, although stone extraction purely for wall building in this area was overshadowed by the lime-burning industries. Twenty-three of the identified sites were quarries, ranging from small field quarries to large complexes of extraction sites with associated trackways and stone-built buildings. The lower slopes and craggy valleys of the southern part of the study area were found to be dominated by evidence of stone extraction. The cliffs of Trevor Rocks were found to be littered with the remains of stone extraction and several associated limekilns

- Above the slopes of this area, rising onto the limestone plateaux leading up to the Bryn-Adda flat, a series of mine shafts were previously recorded (NPRN 150315), and were found to be part of a more extensive mining landscape with trackways criss-crossing the area and descending towards the farm of Dinbren-Uchaf and the roads to Llangollen. To the north and east of the shafts a lead rake can be seen to follow the ore seam up across the limestone pavement.
- 5.4.4 Three previously recorded sites of industrial activity were revisited in this part of the study area, two lime kilns (NRPN 159295 and 159300) and a mill site (NRPN 159294), located in the land owned by Hafod Farm. The kilns were in particularly poor condition, having suffered from erosion by root activity and appeared to have been partially ploughed out. The SMR stated that the mill site was no longer surviving, however the grid reference was slightly inaccurate, and, the curve of the Tref-y-Nant Brook where it crosses the road to the south of Hafod Farm, a platform and associated revetment walling was identified. There is much stone in the brook at this point, which would suggest that this was the site of the mill. The mill does not appear even as a ruin on the first edition OS mapping.
- The eastern corridor of the study area comprised a strip of enclosed agricultural land running north/south between the open moorland, at the heart of the study area, and the moderate urban centres of Acrefair, Rhosllanerchrugog and Minera. Most of the sites recorded from this area reflected the changing agricultural landscape, such as alterations in field boundaries and the rebuilding of more modern farmhouses. Of particular note within this section was the unusual monument of 'Frozen clock' said to be a clock tower housing a water clock that was notorious for freezing and stopping (NPRN 269080). The sites recorded further north in the vicinity of Plas y Fron farmstead were fairly unremarkable, except for the foundations of a searchlight battery (NPRN 269089), a Second World War installation
- 5.4.6 In the north of this section is the farm complex of Fron-Deg, which is still a working farm. The buildings appear to be early post-medieval in date, and are in a reasonable state of repair (NPRN 269102). Within the land held by Fron-Deg is Mutton Hall, a former shooting lodge (NPRN 269099). This is shown on the current and first edition mapping (1878) as a smaller building to the east of the enclosed area around it; in reality, however, it comprised the remains of a complex of earlier stone buildings including out houses and styes. The whole area had a complex system of enclosure walls surrounding it.
- 5.4.7 The area of Bryn Adda and the Ruabon Mountain central yielded only a small number of sites in comparison to that of the equivalent Mynydd Hiraethog area. The area is in the ownership of the Wynnstay Estate, and has been used through at least the nineteenth century as managed grouse shooting land, which has allowed continued heather growth and has riddled the landscape with small drainage channels, inter-cutting trackways and well made grouse shooting butts of stone construction (such as NPRN 269183). Current and first edition OS mapping (1878), as well as previous archaeological surveys, show clearly that the entire non-industrialised area of the Ruabon Mountain is densely covered with shooting butts reflecting its use as a grouse moor over at least 150years.
- 5.4.8 Directly south of the Newtown Mountain Plantation is a substantial enclosure shown on both the OS first edition and the current mapping. Though this was outside the study area. It was considered that a cursory investigation may inform an understanding of its origins

- and historic character. It has internal divisions, not shown on the OS mapping, and the remains of stock enclosures and /or house foundations within it. Newtown Mountain itself has a remarkably complex series of boundary walls and unroofed buildings shown on the maps, suggesting that the area may represent the remains of a dense agricultural settlement on the edges of more marginal upland, but of unknown date.
- 5.4.9 Around the Mountain Lodge was a building known as Buarth-yr-yd (NPRN 269190). As with Mutton Hall, the current mapping only shows part of the complex of buildings; the actual complex is much more complicated and appeared to contain the remains of several phases of building. Further north from the mountain lodge, and again a little outside the study area was a putative powder store (NPRN 269182), comprising two pairs of parallel walls set into an earthen bank with blast walls set in front of the entrances, this structure stands to the immediate west of a line of disused mine shafts. The southern area of Brynn-Adda yielded only a few small quarry sites and visited disused sheepfolds shown on the current OS mapping.
- 5.4.10 North of this, and on towards the Minera Plateau, the landscape is dominated by industrial remains. This entire northern stretch of the study area is a palimpsest landscape of Bronze Age funerary monuments, nestling side by side with shooting butts and heavy industrial exploitation. Enclosed farmland encroaches on the upland areas to the north, and the land drops off towards the mining town of Minera. The north west tip of the study are was dominated by the Pool Park mining complex which was surveyed by the Clywd-Powys Archaeological Trust. The cross over area into the current OA North survey was found to be an extension of this industrial landscape with leats, shafts and workings present in varying states of disuse. South of the Llandegla plantation, the open moor area was found to contain a decreasing amount of industrial remains.
- 5.4.11 Above the plantation at World's End, a small number of mine shafts were added to the already plentiful evidence of industrial activity. Lower down below the plantation the remains of quarries and lime kilns were recorded though in lesser numbers than found around Trevor Rocks. The land has been enclosed on the lower slopes of the Eglwyseg river valley, and the remains of several disused farm building were recorded. Of particular note was a ruined farm south of Pant Glas (NPRN 269074), shown as only a sheep fold on the current map, the disused farm Glyn Farm (NPRN 269075), and the roadside ruined building near Plas Eglwyseg, (NPRN 269140). To the west of this area the land rises again over Aber-Gwern, where large scale slate mining was undertaken, but is now disused.

6. CONCLUSION

6.1 DISCUSSION

- 6.1.1 The survey has recorded a broad range of monuments and landscapes dating between the Bronze Age and the present, although the most significant resource are the prehistoric cairns, of which a significant proportion were funerary monuments. These were most predominant on the broad limestone ridge of steep crags and gentle sloping terraces, surrounding most of the study area; such a topographic setting is typically favoured for Bronze Age funerary monuments (Quartermaine and Leech forthcoming).
- 6.1.2 The predominance of funerary monuments within this scarped terrain that overlooks the adjacent lowlands may suggest that they were the burial grounds of a population occupying the lower valley slopes and fertile river flood plains. The apparent absence of corresponding settlement remains may reflect the poor site visibility from such terrains, or that intensive agricultural practices have removed traces of settlement remains. Away from the limestone crags, there is a markedly reduced density of prehistoric sites; in part this may be because the moors become more gentle and are not visible from the lower slopes, and would not have been such favourable sitings for funerary monuments. However, this may also reflect that these moors have a varied overburden of peat, which would limit the site visibility of earlier sites, while post-medieval sites would be constructed on top of the peat.
- 6.1.3 The northern part of the study area has yielded similar results, if somewhat disturbed. The Minera plateau is pock-marked with the remains of the lead mining industry, but in amongst this can be found prehistoric funerary monuments of the same nature as to the south, located on the same craggy plains or prominent hills and ridges. The Ruabon central area is a gently sloping, peat covered plateau, and particularly from the south and north the 'table-top' of Bryn-Adda and the Minera, it would have been difficult to view from the surrounding lower valleys. Again the peat cover will have severely limited the site visibility.
- 6.1.4 This emphasis on predominantly funerary monuments has marked parallels with other landscapes, such as Mynydd Hiraethog. A recent survey of the Simonside Hills in Northumberland (LUAU 1999) also revealed a topographic setting appropriate for settlement activity, but was found tho have been occupied by abnormally large numbers of funerary monuments, typically large round cairns. In part this characteristic typically reflects an area of localised uplands adjacent to agriculturally viable lowlands, which were sufficiently extensive to be able to accommodate settlement without the need for expansion onto the marginal lands.
- 6.1.5 The lead mining and processing landscapes around the northern part of the study area representing the southernmost extent of a major eighteenth and nineteenth centuries industry of North Wales. These landscapes incorporate not only the extractive elements of the industry, but also the processing components, and the associated communication infrastructure. The survival and complexity of the landscapes mark them as being of considerable archaeological importance and as such warrant further investigation.

7. RECOMMENDATIONS

7.1 RECOMMENDATIONS FOR FURTHER WORK

- 7.1.1 The survey has highlighted a prehistoric landscape that contains a high proportion of monuments which have a funerary character, whilst a relative dearth of associated field systems or extensive cairnfields was identified. This apparent dichotomy may reflect differences of prehistoric activity or may reflect differences of site visibility caused by peat cover. There is a case for the investigation of the peatlands to examine the potential for activity within these area, and may take the form of peat coring to highlight areas of impact on the vegetation of anthropogenic activity. Such approaches are presently being undertaken as part of the OA North Upland Peat project undertaken on behalf of English Heritage to investigate the potential for archaeological activity within the peatland terrain (OA 2002b).
- 7.1.2 There is also a recognisable need for further survey work to follow on from the present identification survey, to examine the detailed character of the funerary sites, to investigate the inter-relationship of the monuments, and to examine the vistas out from the monuments.
- 7.1.3 The lime industry is very well represented within the study area, comprising numerous quarries and associated kilns. The kilns, however, are being degraded as a result of root action from trees growing around the kilns. These industrial remains would benefit from a programme of consolidation and recording works such as that employed in the Arnside Silverdale AONB, a comparable area of limestone upland. This entailed a programme of detailed recording, a condition survey and a programme of limited consolidation stabilisation (Arnside Silverdale AONB 2003).
- 7.1.4 The most important industrial landscapes are those relating to the lead industry in the northern part of the study area around Minera. They are an important integrated complex of extraction and processing, and would benefit from a programme of detail survey recording.

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APPENDIX 1 GAZETTEER OF NEW SITES

| Nprn | Ngr | Туре | Period | Altitude |
|--------|------------|----------------|---------------|----------|
| 150315 | SJ21904480 | MINE | Post Medieval | 400 |
| 151028 | SJ26345074 | FIELD BOUNDARY | Prehistoric | 415 |
| 151052 | SJ24545103 | SHEPFOLD | Post Medieval | 375 |
| 155357 | SJ25705087 | ROUND BARROW | Bronze Age | 455 |
| 156318 | SJ23464544 | ROUND BARROW | Bronze Age | 465 |
| 156319 | SJ23454540 | ROUND BARROW | Bronze Age | 463 |
| 156322 | SJ23154597 | ROUND BARROW | Bronze Age | 485 |
| 156338 | SJ23454963 | ROUND BARROW | Bronze Age | 425 |
| 156375 | SJ22184448 | ROUND BARROW | Bronze Age | 374 |
| 156376 | SJ22384446 | ROUND BARROW | Bronze Age | 412 |
| 159294 | SJ24884388 | MILL | Post Medieval | 292 |
| 159295 | SJ25014454 | KILN | Post Medieval | 316 |
| 159300 | SJ25224420 | KILN | Post Medieval | 292 |
| 269053 | SJ22594338 | LIME KILN | Post-Medieval | 215m |
| 269054 | SJ22274390 | WALL | Post-Medieval | 237m |
| 269055 | SJ22544417 | CAIRN | Post-Medieval | 416m |
| 269056 | SJ22774400 | QUARRY | Post-Medieval | 424m |
| 269057 | SJ23854316 | WALL | Post-Medieval | 339m |
| 269058 | SJ23234367 | QUARRY | Post-Medieval | 388m |
| 269059 | SJ23404326 | QUARRY | Post-Medieval | 306m |
| 269060 | SJ24014296 | QUARRY | Post-Medieval | 300m |
| 269061 | SJ22974343 | MARKER | Post-Medieval | 372m |
| 269062 | SJ24014296 | BUILDING | Post-Medieval | 298m |
| 269063 | SJ22764341 | QUARRY | Post-Medieval | 350m |
| 269064 | SJ21834449 | FARMYARD | Post-Medieval | 287m |
| 269065 | SJ21744472 | TRACKWAY | Post-Medieval | 332m |
| 269066 | SJ22194468 | TRACKWAY | Post-Medieval | 400m |
| 269067 | SJ22414489 | QUARRY | Post-Medieval | 433m |
| 269068 | SJ22364483 | SHAFTS | Post-Medieval | 431m |
| 269069 | SJ22384474 | SHAFTS | Post-Medieval | 429m |
| 269070 | SJ22324448 | SHAFTS | Post-Medieval | 442m |
| 269071 | SJ22424424 | CAIRN | Prehistoric | 423m |
| 269072 | SJ22154438 | CAIRN | Prehistoric | 402m |
| 269073 | SJ21554751 | FIELD SYSTEM | Post-Medieval | 360m |
| 269074 | SJ21494731 | FARMHOUSE | Post-Medieval | 358m |
| 269075 | SJ21304712 | FARM BUILDINGS | Post-Medieval | 345m |
| 269076 | SJ21094691 | QUARRY | Post-Medieval | 380m |
| 269077 | SJ21074710 | QUARRY | Post-Medieval | 390m |
| 269078 | SJ25074444 | FARMHOUSE | Post-Medieval | 313m |
| 269079 | SJ25824523 | LIME KILN | Post-Medieval | 308m |
| 269080 | SJ25754531 | CLOCK TOWER | Post-Medieval | 318m |
| 269081 | SJ24294508 | CAIRN | Prehistoric | 427m |

| 269082 | SJ23994504 | CAIRNS | Prehistoric | 445m |
|--------|------------|---------------------|---------------|------|
| 269083 | SJ23364533 | SHAFTS | Post-Medieval | 468m |
| 269084 | SJ23304528 | SHAFT | Post-Medieval | 458m |
| 269085 | SJ23754464 | CLEARANCE CAIRNS | Post-Medieval | 422m |
| 269086 | SJ24294476 | CAIRN | Prehistoric | 406m |
| 269087 | SJ24464480 | BOUNDARY BANK | Post-Medieval | 387m |
| 269088 | SJ24054424 | QUARRY | Post-Medieval | 337m |
| 269089 | SJ24444444 | QUARRY | Post-Medieval | 346m |
| 269090 | SJ27294933 | HOUSE | Post-Medieval | 305m |
| 269091 | SJ27214845 | DROVE ROAD | Post-Medieval | 272m |
| 269092 | SJ27414829 | FIELD SYSTEM | Post-Medieval | 241m |
| 269093 | SJ27124899 | SPRING | Post-Medieval | 318m |
| 269094 | SJ27044898 | QUARRY | Post-Medieval | 324m |
| 269095 | SJ26924891 | TRACKWAY | Post-Medieval | 328m |
| 269096 | SJ26694872 | FIELD SYSTEM | Post-Medieval | 337m |
| 269097 | SJ27084836 | QUARRY | Post-Medieval | 292m |
| 269098 | SJ27444844 | SEARCHLIGHT BATTERY | Post-Medieval | 242m |
| 269099 | SJ27344974 | LODGE | Post-Medieval | 308m |
| 269100 | SJ27674979 | QUARRY | Post-Medieval | 262m |
| 269101 | SJ27734975 | MOUND | Unknown | 242m |
| 269102 | SJ27414961 | FARMYARD | Post-Medieval | 280m |
| 269103 | SJ25455108 | SHAFT | Post-Medieval | 428m |
| 269104 | SJ25475100 | SHAFT | Post-Medieval | 429m |
| 269105 | SJ25625102 | MINE | Post-Medieval | 448m |
| 269106 | SJ25645088 | QUARRY | Post-Medieval | 462m |
| 269107 | SJ25755101 | SHAFT | Post-Medieval | 451m |
| 269108 | SJ25895096 | SHAFT | Post-Medieval | 458m |
| 269109 | SJ26065080 | SHAFT | Post-Medieval | 446m |
| 269110 | SJ25205109 | MINE | Post-Medieval | 405m |
| 269111 | SJ24635122 | BOUNDARY BANKS | Unknown | 390m |
| 269112 | SJ24525122 | QUARRY | Post-Medieval | 398m |
| 269113 | SJ24485112 | QUARRY | Post-Medieval | 397m |
| 269114 | SJ24365137 | BOUNDARY BANK | Post-Medieval | 398m |
| 269115 | SJ24445157 | BOUNDARY BANK | Post-Medieval | 402m |
| 269116 | SJ24415214 | BOUNDARY BANK | Post-Medieval | 350m |
| 269117 | SJ24645102 | BOUNDARY BANK | Post-Medieval | 398m |
| 269118 | SJ25525129 | MINE | Post-Medieval | 390m |
| 269119 | SJ26435096 | BUILDING | Post-Medieval | 425m |
| 269120 | SJ26345102 | BOUNDARY BANK | Post-Medieval | 405m |
| 269121 | SJ26215105 | CAIRN | Unknown | 423m |
| 269122 | SJ24425045 | BOUNDARY BANK | Unknown | 389m |
| 269123 | SJ24395018 | SHAFT | Post-Medieval | 412m |
| 269124 | SJ23125022 | WATER COURSE | Post-Medieval | 463m |
| 269125 | SJ23455008 | BOUNDARY STONE | Unknown | 441m |
| 269126 | SJ24154984 | SHAFTS | Post-Medieval | 435m |
| 269127 | SJ22784985 | CAIRN | Bronze Age | 497m |
| 269128 | SJ23544968 | SHAFT | Post-Medieval | 420m |
| | | | | |

| 269129 | SJ22244875 | BOUNDARY STONE | Post-Medieval | 454m |
|--------|------------|----------------|---------------|------|
| 269130 | SJ22684891 | SHOOTING BUTT | Post-Medieval | 458m |
| 269131 | SJ23254908 | QUARRY | Post-Medieval | 423m |
| 269132 | SJ21974538 | BUILDING | Post-Medieval | 267m |
| 269133 | SJ21974549 | LIME KILN | Post-Medieval | 297m |
| 269134 | SJ21954552 | LIME KILN | Post-Medieval | 298m |
| 269135 | SJ22164613 | SHAFTS | Post-Medieval | 305m |
| 269136 | SJ22254677 | TRACKWAY | Post-Medieval | 308m |
| 269137 | SJ22254675 | SHAFT | Post-Medieval | 317m |
| 269138 | SJ21564571 | QUARRY | Post-Medieval | 203m |
| 269139 | SJ21544595 | QUARRY | Post-Medieval | 194m |
| 269140 | SJ21574605 | BUILDING | Post-Medieval | 179m |
| 269141 | SJ23284778 | FORD | Post-Medieval | 309m |
| 269142 | SJ26465119 | QUARRY | Post-Medieval | 413m |
| 269143 | SJ26365138 | WALL | Post-Medieval | 373m |
| 269144 | SJ26305139 | SHAFT | Post-Medieval | 371m |
| 269145 | SJ26265144 | BUILDING | Post-Medieval | 362m |
| 269146 | SJ26145147 | LEAT | Post-Medieval | 370m |
| 269147 | SJ26015149 | SPOIL HEAP | Post-Medieval | 365m |
| 269148 | SJ25875146 | QUARRY | Post-Medieval | 383m |
| 269149 | SJ25625138 | SHAFT | Post-Medieval | 403m |
| 269150 | SJ27585068 | FARMHOUSE | Post-Medieval | 270m |
| 269151 | SJ27345076 | WATER CHANNEL | Post-Medieval | 304m |
| 269152 | SJ20804888 | CAIRN | Bronze Age | 581m |
| 269153 | SJ20714888 | CAIRN | Bronze Age | 575m |
| 269154 | SJ20504962 | EARTHWORK | Unknown | 480m |
| 269155 | SJ20414978 | CAIRN | Bronze Age | 441m |
| 269156 | SJ19804985 | FARMHOUSE | Post-Medieval | 325m |
| 269157 | SJ27574997 | PLATFORM | Post-Medieval | 310m |
| 269158 | SJ27075006 | FARMHOUSE | Post-Medieval | 322m |
| 269159 | SJ27395012 | SCHOOL HOUSE | Post-Medieval | 222m |
| 269160 | SJ23524475 | SHEEPFOLD | Post-Medieval | 420m |
| 269161 | SJ21934572 | LIME KILN | Post-Medieval | 302m |
| 269163 | SJ22104405 | LIME KILN | Post-Medieval | 237m |
| 269164 | SJ25754534 | EARTHWORK | Unknown | 386m |
| 269165 | SJ24794590 | CAIRN | Bronze-Age | 394m |
| 269166 | SJ23834637 | RESERVOIR | Post-Medieval | 455m |
| 269167 | SJ23734641 | FARMHOUSE | Post-Medieval | 443m |
| 269168 | SJ24674622 | BOUNDARY BANK | Unknown | 411m |
| 269169 | SJ24734615 | CAIRN | Bronze Age | 390m |
| 269170 | SJ24394563 | QUARRY | Post-Medieval | 401m |
| 269171 | SJ23644571 | CAIRN | Bronze Age | 515m |
| 269172 | SJ23464567 | EARTHWORKS | Unknown | 506m |
| 269173 | SJ23214596 | SHAFTS | Post-Medieval | 515m |
| 269174 | SJ23134629 | CAIRN | Unknown | 531m |
| 269175 | SJ26154655 | BOUNDARY BANK | Post-Medieval | 320m |
| 269176 | SJ25674617 | SHOOTING BUTT | Post-Medieval | 339m |

| 269177 | SJ26404737 | QUARRY | Post-Medieval | 307m |
|--------|------------|---------------|---------------|------|
| 269178 | SJ26394750 | EARTHWORK | Unknown | 325m |
| 269179 | SJ26454766 | SHAFTS | Post-Medieval | 327m |
| 269180 | SJ26514783 | SHAFTS | Post-Medieval | 347m |
| 269181 | SJ26344834 | SHAFTS | Post-Medieval | 340m |
| 269182 | SJ26064845 | POWDER STORE | Post-Medieval | 378m |
| 269183 | SJ26214747 | SHOOTING BUTT | Post-Medieval | 324m |
| 269184 | SJ26224749 | TRACKWAY | Post-Medieval | 321m |
| 269185 | SJ25994695 | SHOOTING BUTT | Post-Medieval | 334m |
| 269186 | SJ24434727 | POND | Post-Medieval | 460m |
| 269187 | SJ24034760 | SHAFTS | Post-Medieval | 454m |
| 269188 | SJ23674693 | EARTHWORK | Unknown | 471m |
| 269189 | SJ25054643 | SHOOTING BUTT | Post-Medieval | 385m |
| 269190 | SJ26234733 | FARMHOUSE | Post-Medieval | 319m |
| 269191 | SJ26544850 | SHAFTS | Post-Medieval | 346m |
| 269192 | SJ26594906 | SHOOTING BUTT | Post-Medieval | 394m |
| 269193 | SJ25714572 | FIELD SYSTEM | Post-Medieval | 330m |

ILLUSTRATIONS

Figure 1: Location Map

Figure 2: Ruabon Mountain Study Area

Figure 3: Site distribution showing both pre- and post-survey sites

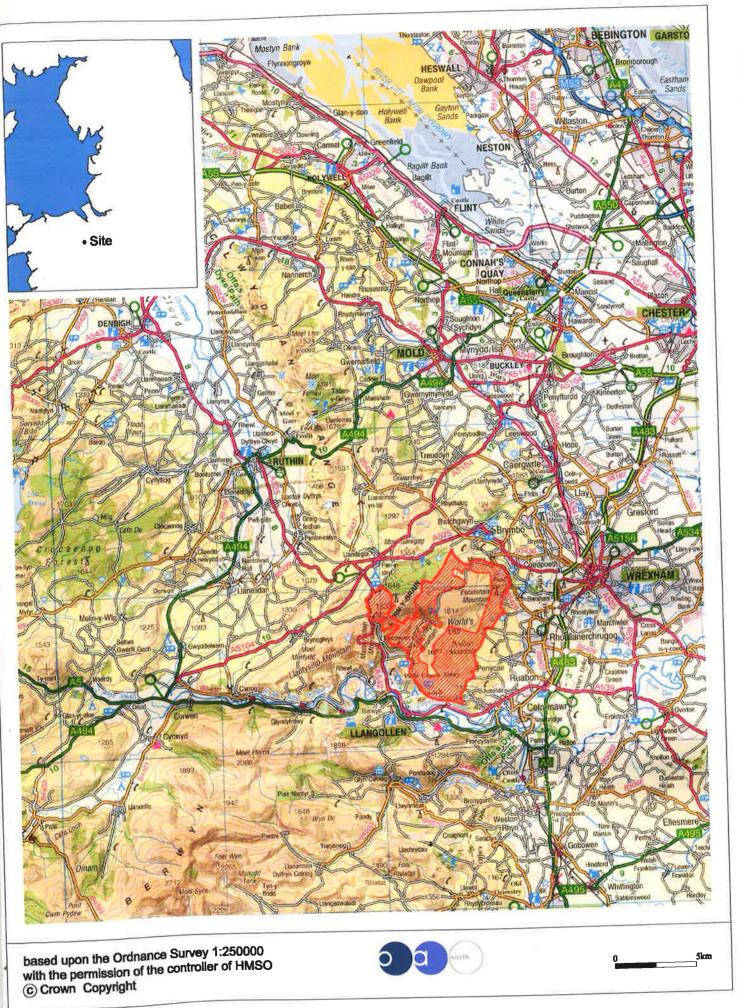


Figure 1: Location Map

Figure 2: Ruabon Mountain Study Area

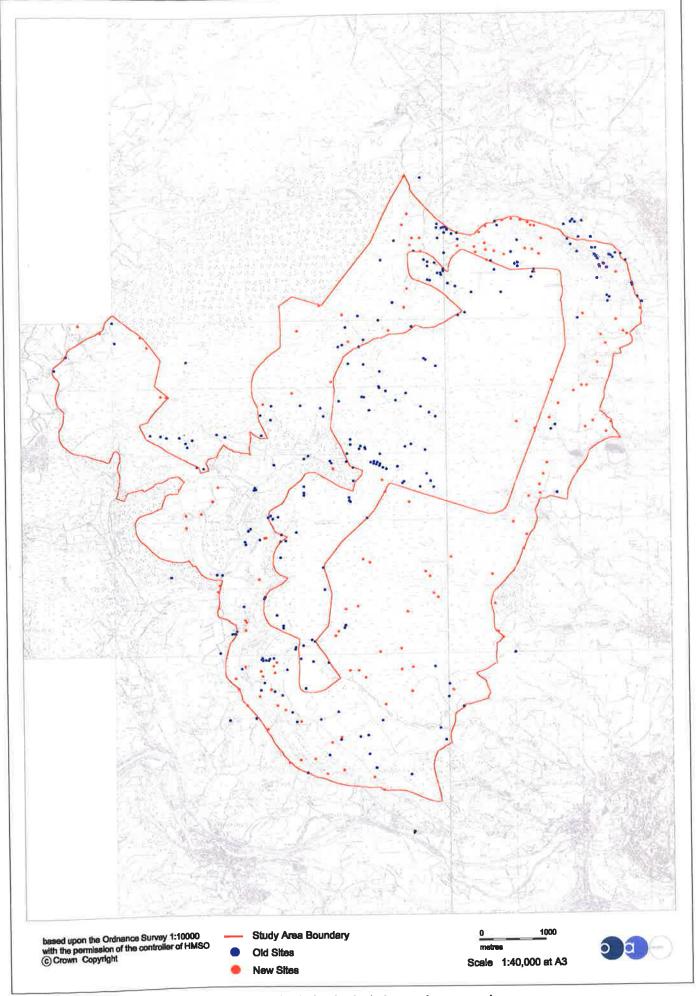


Figure 3: Site distribution showing both pre- and post survey sites