

RHOSAMMAN COAL WORKINGS, CARMARTHENSHIRE: ARCHAEOLOGICAL WALKOVER SURVEY



Rhosamman coal workings looking SW.



Prepared by Dyfed Archaeological Trust
For: Brecon Beacons National Park



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**RHOSAMMAN COAL WORKINGS,
CARMARTHENSHIRE:
ARCHAEOLOGICAL WALKOVER SURVEY**

By

Hubert Wilson

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**RHOSAMMAN COAL WORKINGS, CARMARTHENSHIRE
ARCHAEOLOGICAL WALKOVER SURVEY**

Client

Breacon Beacons National Park

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EXECUTIVE SUMMARY

DAT Archaeological Services were commissioned by the Brecon Beacons National Park Authority to undertake an archaeological walkover survey using a Trimble GPS, in an area of early coal workings (NPRN 309960; PRN 3872) between the River Amman and Nant Fydd, centred on (NGR SN 71579 74089), in advance of a programme of infilling by the National Coal Board.

CRYNODEB GWEITHREDOL

Comisiynwyd Gwasanaethau Archeolegol YAD gan Awdurdod Parc Cenedlaethol Bannau Brycheiniog i gynnal arolwg cerdded gan ddefnyddio Trimble GPS, mewn ardal o weithfeydd glo cynnar (PRN 3872; NPRN 309960) rhwng Afon Amman a Nant Fydd, wedi'i ganoli ar (NGR SN 71579 74089), cyn rhaglen o fewnlenwad gan y Bwrdd Glo Cenedlaethol.

1.1 INTRODUCTION

1.1 Project Commission

- 1.1.1 DAT Archaeological Services were commissioned by the Brecon Beacons National Park Authority to undertake an archaeological walkover survey using a Trimble GPS across an area of early coal workings between the River Amman and Nant Fydd centred on (NGR SN 71579 74089, Figure 1). The land is open access land owned by Celtic Energy and is located within the Brecon Beacons National Park.
- 1.1.2 The aim of the proposed walkover survey was to provide a geo-referenced survey of the early coal workings, with accompanying photographs and text.
- 1.1.3 Prior to the walkover survey the Coal Authority had commenced backfilling the coal workings in response to safety concerns (to date 11 pits have been backfilled). The Brecon Beacons National Park Authority commissioned the archaeological survey of the remainder of the site before any further backfilling took place.

1.2 Report Outline

- 1.2.1 This report provides a summary and discussion of the archaeological walkover survey and its results.

1.3 Illustrations

- 1.3.1 Printed map extracts are not necessarily reproduced to their original scale. On maps, north is towards the top of the page unless otherwise indicated.

1.4 Timeline

- 1.4.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Table 1: Archaeological and Historical Timeline for Wales.

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	

Post-Medieval Period ¹ –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

¹ The post-medieval and Industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

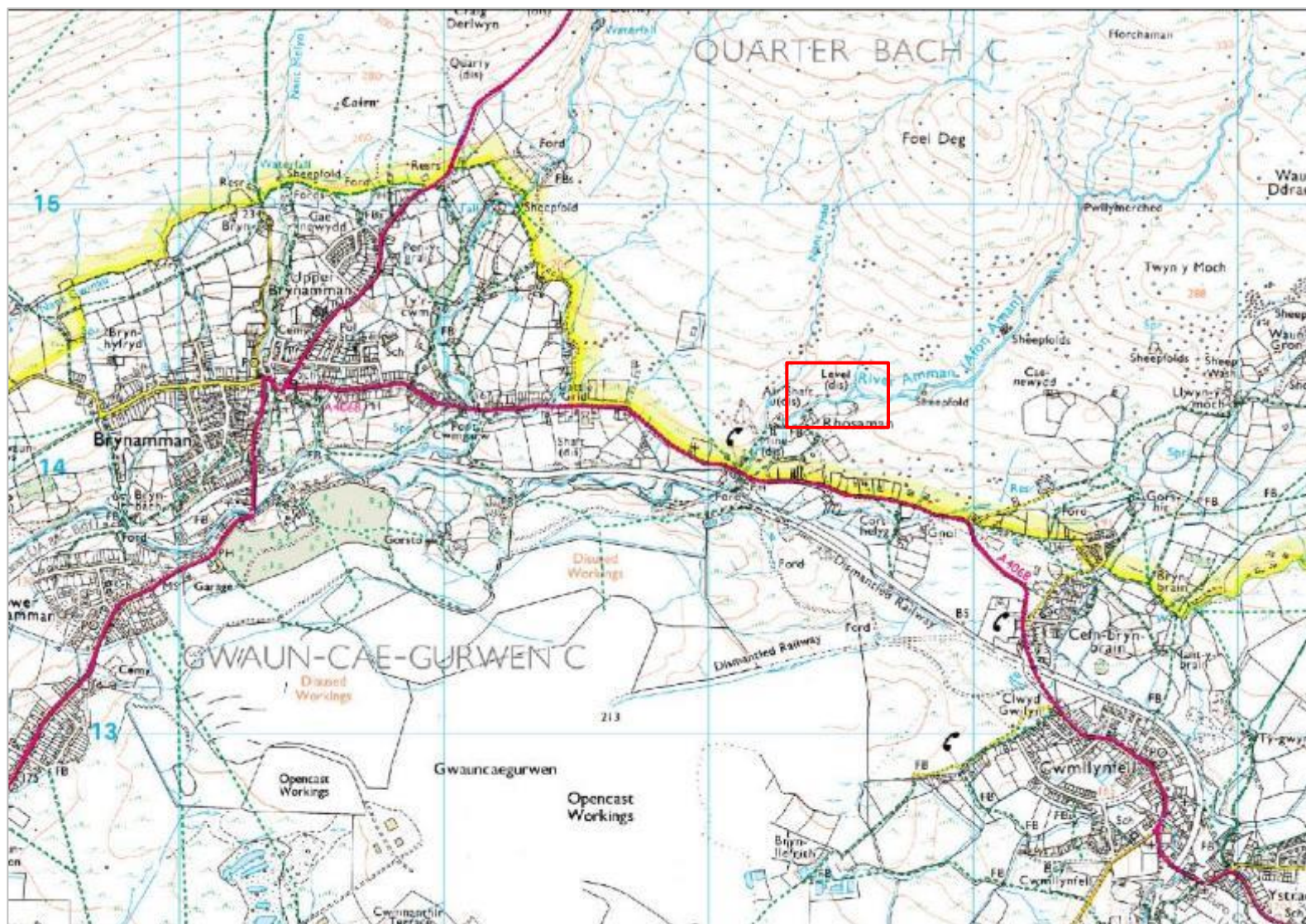


Figure 1: Location of walkover survey (red box).

Reproduced from the Ordnance Survey 1:25,000 scale map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust Ltd., The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No 100020930



Figure 2: Aerial image showing early coal workings © Google

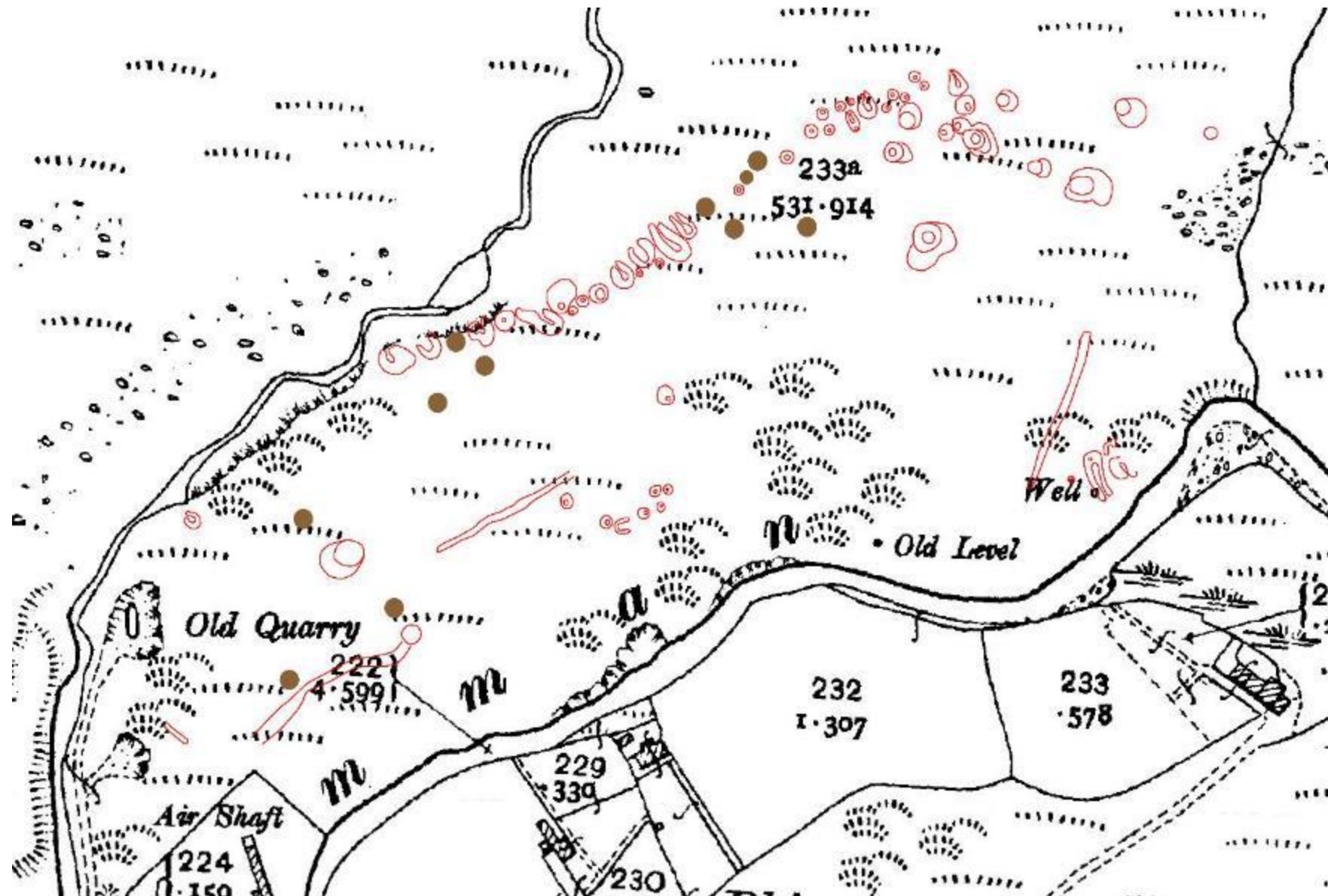


Figure 3: Survey results of early coal workings superimposed onto an extract of the 2nd Edition OS map published in 1906.
(Brown dots indicate coal workings that were infilled prior to the walkover survey)



Figure 4: Aerial image superimposed with survey results of early coal workings © Google

2. THE SITE

2.1 Location and Topography

- 2.1.1 The majority of the survey area was situated on a slightly undulating plateau of moorland between the 190m and 200m contours at the southern edge of the Brecon Beacons National Park, approximately 300m north of the village of Rhosamman. The land slopes down to the River Amman to the south and Nant Fydd to the north. The town of Ammanford lies 9.5kms to the west and the city of Swansea 20kms to the south.
- 2.1.2 A row of adits, dug into the valley slope, were visible at the northern side of the area, whilst shafts, visible as hollows (some conical others amorphous) occupied the plateau area, particularly at the NE end of the area. (Figure 2).
- 2.1.3 Where the River Amman had scoured the bank one of the coal seams was clearly seen (Photo 1). Where a coal vein had evidently been close to the surface, linear coal-workings were visible. Also noted were two earth and stone banks. These had the characteristics of 'pillow-mounds'.
- 2.1.4 The underlying solid geology of the site comprises South Wales Lower Coal Measures Formation - Mudstone, Siltstone and Sandstone. Sedimentary Bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period. Local environment previously dominated by swamps, estuaries and deltas (British Geological Survey 2020).



Photo 1: Exposed coal deposits in bank of River Amman (1m scale)

3. HISTORICAL BACKGROUND

- 3.1 Rhosamman Coal workings are recorded on the Historic Environment Record under PRN 3872 (Figure 5) and described thus:

PRN 3872: An area of mine workings on a knoll between the Amman and Fydd. Includes early vertical pits, an open quarry and air shafts and levels representing probably diverse periods of exploitation. (TAJ 15-2-89).



Figure 5: An aerial photograph taken in 1988 showing the Rhosamman coal workings (outlined in red) (© DAT AP88-139.19)

- 3.2 The coal workings have also been recorded by the Royal Commission on the Ancient and Historical Monument of Wales under NPRN 309960 and are listed as:
1. A band of pitting, extending c.300m NE-SW & at most c.50m across. Possibly coal-pits, Rhos Aman colliery being situated c.300m to the SW: old levels & quarries are shown in the general area on OS County series 2nd ed. (Carmarthen. XLIX.4 1898). RCAHMW AP881895/7; 955069/43 J.Wiles 29.01.04
 2. Bell Pits and other features resulting from early exploitation of local coal deposits at the moorland edge, pre-dating the later Rhosaman Colliery. The area has been partly graded and reclaimed. D.K.Leighton, RCAHMW, 16 February 2011
- 3.3 The coal workings are of local archaeological and historical significance and are a good example of how coal or culm was mined in the past where it outcropped near the ground surface. The methods used to extract the coal varied little from the medieval period right up until the early 19th century, making individual sites very difficult to date.

- 3.4 As well as shallow open-cut workings, coal was mined by excavating pits or shafts commonly referred to as 'bell Pits' (Figure 6). Often 2 or more shafts were sunk about 40-50 metres apart and joined by an underground passage to allow free circulation of air. When this was done the miners went down and began to dig out the coal on each side of the connecting passage. All of the coal could not be taken out as the roof would have collapsed, so pillars of coal were left as supports.

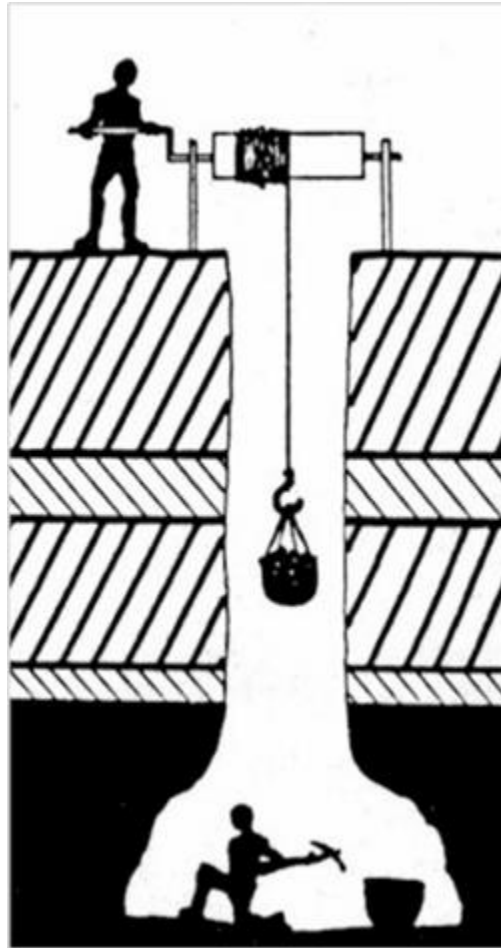


Figure 6: A section through a typical bell pit.

- 3.5 The majority of these shallow workings were worked on a small, though well-organised scale by people living locally and are not usually documented. Insight into the method of shallow coal mining in the 17th and 18th centuries in the Brynamman area can be found in 'Annibynwyr Gwaun-cae-Gurwen' (Huws 1942)²:

"The district, in an industrial region, expanded early in the nineteenth century, and the growth of the church in the century was to a degree linked through the growth of the coal business. There are traces of coal workings here from early in the seventeenth century.

We have the history of the old court of the Manor of Gwaun-Cae-Gurwen being held in 1610, adjudicating that the coal and seams below the ground in the possession of a tenant, were owned by the tenant and not by the landlord, and that the tenant could dig, excavate and sell the coal without the permission of the owner of the land.

² Huws, L, C, 1942 'The history of the chapels of Carmel, Gwaun-cae-Gurwen and Tabernacle, Cwmgors'

They worked the coal in those times in a very elementary way; only moving the earth that was on the seams that outcropped to the surface, and after digging the coal, throwing the earth back into the holes. By today, not bothering to throw anything back, but leaving ugly tips of rubble to spoil the look of the place; that's deterioration in one sense at least.

Of late, they have excavated shallow pits, some fifteen or twenty yards deep, from some they carried the coal in wicker baskets after tying them to men's backs, and them climbing ladders fixed on the sides of the pits. The coal worker was assisted by some of his children, and sometimes by his wife as well, dragging a sort of small cart through the works. There were children of seven- and eight-years old working in these pits, and it was expected that a girl carried a ton of coal in a day for a wage of eight pence. We have pictures today of girls with ropes round their shoulders, pulling carts in some of the mines in this district in the early period referred to.

They carried the coal from these pits along rough tracks with horses and donkeys, with packs on their backs, until the main road was built in 1815-17, to connect the place with Pontardawe.'

- 3.6 The author also points out that there are scores of these holes scarring the hills around the district; a typical example being those at Rhosamman (Figures 3-4).
- 3.7 Larger and deeper pits were sunk in the 19th century following advances in mining methods and machinery, such as the nearby Rhos-Amman Colliery and Blaen-Cae-Gurwen Colliery.
- 3.8 The coal workings are depicted in David Leighton's 2012 book 'The Western Brecon Beacons. The archaeology of Mynydd Du and Fforest Fawr'³, and are also located on the route of the Amman and Loughor Heritage Trails, developed in 2007.

³ Leighton, D, 2012 'The Western Brecon Beacons: The Archaeology of Mynydd Du and Fforest Fawr' The Royal Commission on the Ancient and Historical Monuments of Wales.

4. WALKOVER SURVEY METHODOLOGY

4.1 Fieldwork

- 4.1.1 The survey was conducted using a Trimble GPS.

4.2 Timetabling of Fieldwork

- 4.2.1 The survey took place on the 3rd and 4th of November 2021. The weather was mainly dry with occasional showers.

4.3 Post-Fieldwork Reporting and Archiving

- 4.3.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with specifications in Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 4.3.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.
- 4.3.3 A report fully representative of the results of the fieldwork has been prepared.

5. WALKOVER SURVEY RESULTS

- 5.1 A total of seventy features were surveyed using a Trimble GPS. Sixty-eight features were identified as being the result of coal extraction of which eleven pits had been backfilled and are shown on the plans as brown dots. Some of the coal workings had been fenced off instead of backfilled and this is noted in the descriptions. The remaining two features were either unfinished field boundaries or possibly pillow-mounds.
- 5.2 For convenience the survey results have been divided into Areas 1, 2, 3 and 4 (Figure 7).

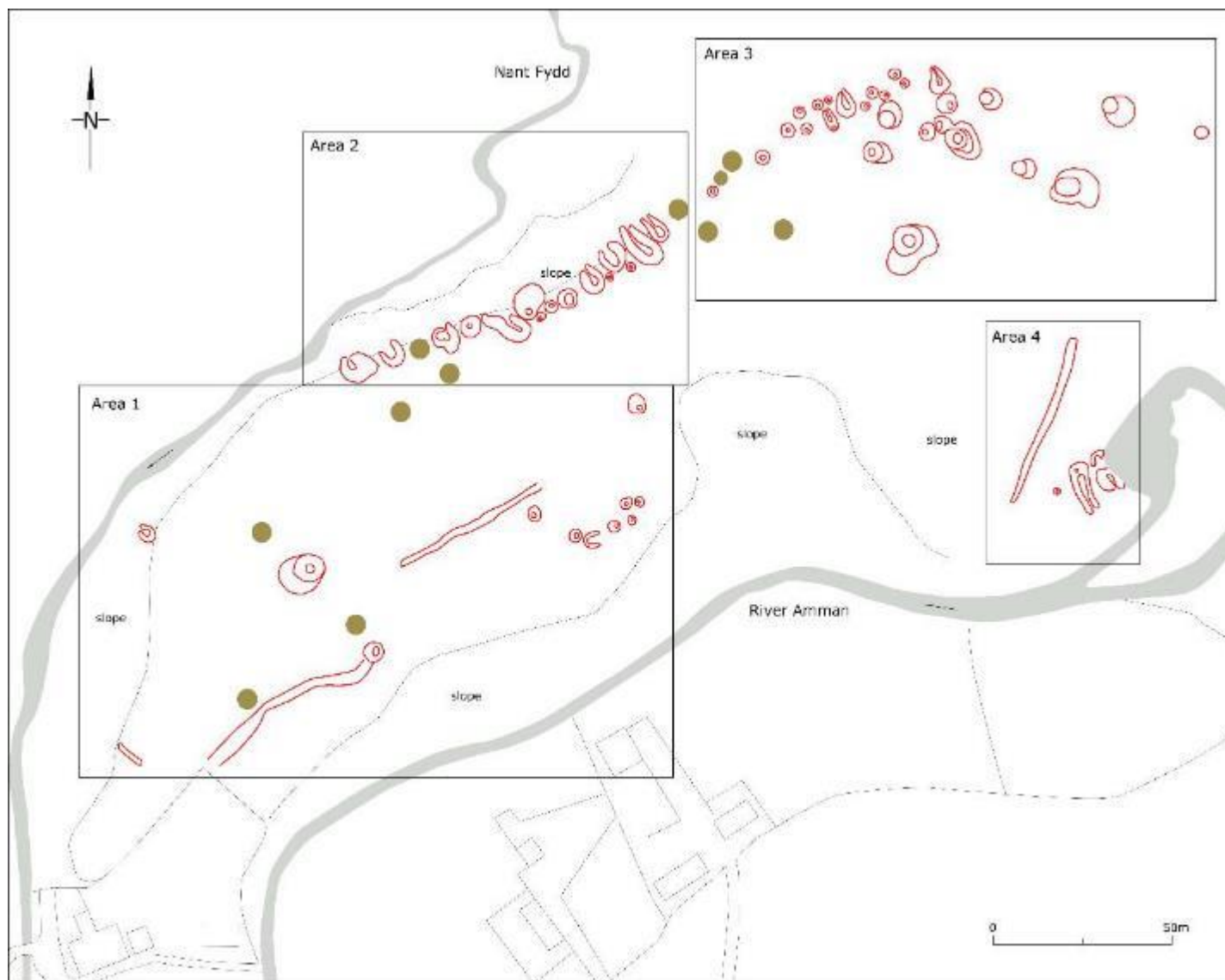


Figure 7: Plan of early coal workings
(Brown dots indicate coal workings that were infilled prior to the walkover survey)

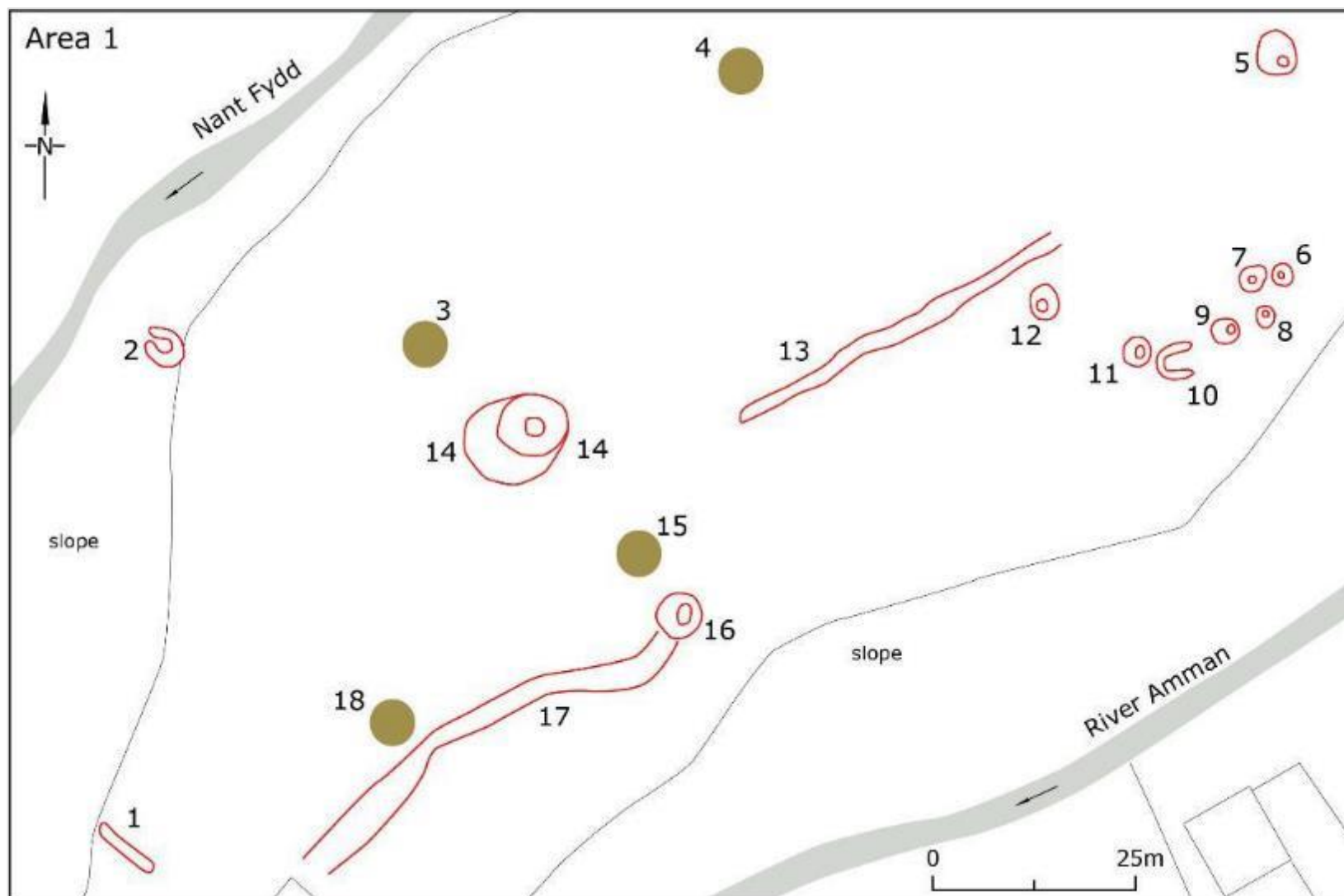


Figure 8: Features surveyed in Area 1

5.3 Area 1 (Figure 8)

Feature 1 – Centred on SN 73249 14213

Short linear bank, 7.5m long, 1.5m wide and up to 0.45m high. There is a small ditch on its southern side and stones are visible in its construction. It is not attached to any other bank and would seem to be either unfinished or a possible pillow-mound.



Photo 2: View NW along Feature 1 (possible pillow mound) (1m scale)



Photo 3: View NE towards Feature 1 (southern side of bank) (1m scale)-

Feature 2 – Centred on SN 73252 14275

Former coal workings (7.8m long, 4.5m wide and 2.96m from top of feature to its base) consisting of two spoil heaps either side of a path leading to a possible adit.



Photo 4: View NW towards Feature 2 (1.m scale)



Photo 5: View SW towards Feature 2 (1m scale)

Feature 3 – Centred on SN 73284 14275

Backfilled hollow measuring approximately 6m in diameter with a spoil heap on its western edge.



Photo 6: View NW toward Feature 3 (1m scale)

Feature 4 – Centred on SN 73324 14308

Backfilled coal shaft, approximately 4.5m diameter.



Photo 7: View north towards Feature 4 (1m scale)

Feature 5 – Centred on SN 73390 14311

Former coal working visible as a hollow, approximately 4.5m across and 1.5m deep.



Photo 8: View south towards Feature 5 (1m scale)



Photo 9: View east towards Feature 5 (1m scale)

Feature 6 – Centred on SN 73390 14284

Former coal working seen as a hollow, approximately 4.5m wide and 0.9m deep.



Photo 10: View east towards Feature 6 (1m scale)

Feature 7 – Centred on SN 73387 14283

Former coal working seen as hollow, approximately 3m wide and 1m deep.



Photo 11: View west towards Feature 7 (1m scale)

Feature 8 – Centred on SN 73387 14278

Former coal working seen as a hollow, approximately 2.5m wide and 0.6m deep



Photo 12: View east towards Feature 8 (1m scale)

Feature 9 – Centred on SN 73383 14277

Former coal working seen as a hollow approximately 2.5m wide and 0.7m deep.



Photo 13: View SE towards Feature 9 (1m scale)

Feature 10 – Centred on SN 73377 14273

Former coal working seen as a crescent shaped hollow approximately 4.0m wide and 0.95m deep.



Photo 14: View SW towards Feature 10 (1m scale)

Feature 11 – Centred on SN 73372 14274

Former coal working seen as a hollow approximately 2.5m wide and 0.8m deep.



Photo 15: View east towards Feature 11 (1m scale)

Feature 12 – Centred on SN 73361 14280

Former coal working visible as hollow with spoil heap on north side; measures 2.5m wide and 1m deep.



Photo 16: View east towards Feature 12 (1m scale)



Photo 17: View south towards Feature 12 (1m scale)

Feature 13 – Centred on SN 73343 14276

Former linear open-cut working measuring approximately 46m long, up to 3.3m wide and 0.4m deep.



Photo 17: View SW towards Feature 13 (1m scale)



Photo 18: View NE towards Feature 13 (1m scale)

Feature 14 – Centred on SN 73298 14265

Former coal working seen as water filled hollow with spoil heap on west side; measures 7.5m wide and 12.5m wide including spoil heap.



Photo 18: View south towards Feature 14 (1m scale)



Photo 19: View east towards Feature 14 (1m scale)

Feature 15 – Centred on SN 73312 14248

Filled in coal working up to 10m wide.



Photo 20: View south towards Feature 15 (1m scale)

Feature 16 - Centred on SN 73316 14241

Former coal working seen as a hollow approximately 4.2m wide and 0.5m deep.



Photo 21: View NW towards Feature 16 (1m scale)

Feature 17 – Centred on SN 73292 14228

Former linear open-cut working, approximately 49m long, up to 4m wide and 2m deep.



Photo 22: View SW towards Feature 17 (1m scale)

Feature 18 – Centred on SN 73281 14229

Filled in coal working approximately 6m in diameter.



Photo 23: View north towards Feature 18 (1m scale)

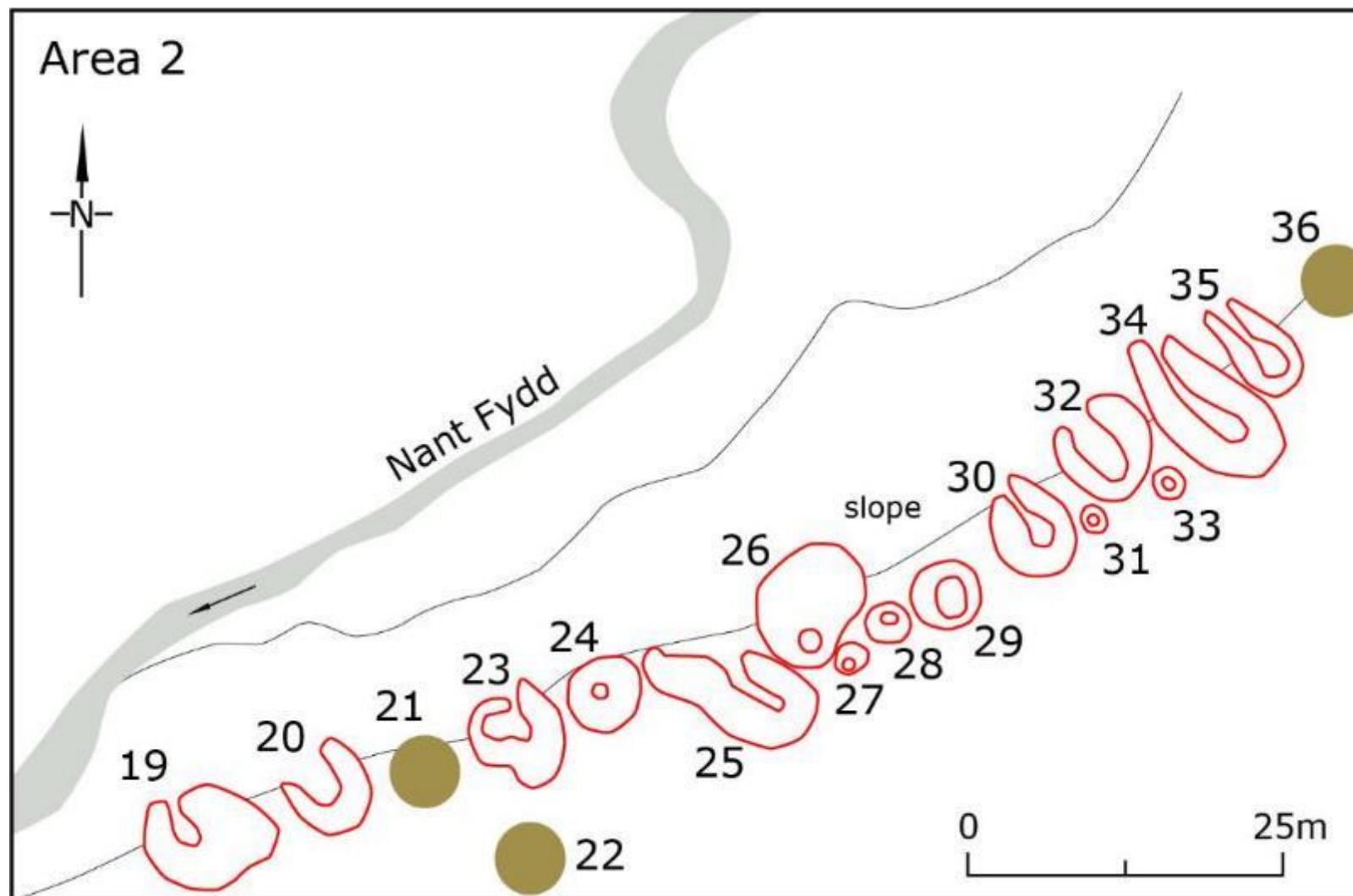


Figure 9: Features surveyed in Area 2

5.4 Area 2 (Figure 9)

Feature 19 – Centred on SN 73311 14319

Earthworks associated with probable adit approximately 9m long, 8m wide and 3.4m deep, consisting of a scoop gouged into the valley side.



Photo 24: View NE towards east side of Feature 19 (1m scale)



Photo 25: View NW towards Feature 19 (1m scale)

Feature 20 – Centred on SN 73321 14324

Earthworks associated with probable adit approximately 7m long and 5.5m wide, consisting of a scoop gouged into the valley side.



Photo 26: View NE towards Feature 20 (1m scale)

Feature 21 – Centred on SN 73328 14326

Backfilled former coal working approximately 6.5m wide.



Photo 27: View north across backfilled Feature 21 (1m scale)

Feature 22 – Centred on SN 73337 14319

Backfilled former coal working approximately 4.5m wide.



Photo 28: View north across backfilled Feature 22 (1m scale)

Feature 23 - Centred on SN 73337 14329

Earthworks associated with former coal workings on valley slope consisting of a scoop and related spoil heaps measuring 10m long, 8m wide and 1.7m deep.



Photo 29: View east across Feature 23 (1m scale)



Photo 30: View NW across Feature 23 (1m scale)

Feature 24 – Centred on SN 73343 14332

Earthworks associated with former coal workings on valley slope comprised of a scoop and related spoil heaps measuring 6m wide and 1.85m deep.



Photo 31: View NE across Feature 24 (1m scale)



Photo 32: View SE across Feature 24 (1m scale)

Feature 25 – Centred on SN 73354 14383

Earthworks associated with former coal workings on valley slope consisting of a scoop and related spoil heaps measuring 6.0m wide and 2.3m deep.



Photo 33: View SE towards Feature 25 (1m scale)



Photo 34: View NW across Feature 25 (1m scale)

Feature 26 – Centred on SN 73359 14337

Earthworks associated with former coal workings on valley slope consisting of a scoop and related spoil heaps measuring 9.0m by 8.0m and 1.6m deep.



Photo 35: View east towards Feature 26 (1m scale)



Photo 36: View west towards Feature 26 (1m scale)

Feature 27 – Centred on SN 73362 14335

Former coal working visible as a small depression measuring 2.2m in diameter.



Photo 37: View SE towards Feature 27 (1m scale)

Feature 28 – Centred on SN 73365 14338

Former coal working seen as a small depression measuring 2.4m in diameter and 1.4m deep.



Photo 38: View SE towards Feature 28 (1m scale)

Feature 29 – Centred on SN 73369 14340

Former coal working visible as a depression measuring 3.8m in diameter and 1.7m deep.



Photo 39: View east towards Feature 29 (1m scale)



Photo 40: View SE towards Feature 29 (1m scale)

Feature 30 – Centred on SN 73377 14346

Earthworks associated with former coal workings on valley slope consisting of a scoop and related spoil heaps measuring 6m in diameter and 2.7m deep.



Photo 41: View SE towards Feature 30 (1m scale)



Photo 42: View SW towards Feature 30 (1m scale)

Feature 31 – Centred on SN 73382 14346

Former coal working seen as small depression measuring 1.6m diameter.



Photo 43: View south towards Feature 31 (1m scale)

Feature 32 – Centred on 73382 14346

Earthworks associated with former coal workings on valley slope consisting of a hollow and related spoil heaps measuring 6.0m in diameter and 1.25m deep.



Photo 44: View NW towards Feature 31 (1m scale)



Photo 45: View north towards Feature 31 (1m scale)

Feature 33 – Centred on SN 73388 14349

Former coal working visible as a small depression measuring 2.2m in diameter.



Photo 46: View south towards Feature 33 (1m scale)

Feature 34 – Centred on SN 73392 14354

Earthworks associated with former coal workings on valley slope consisting of a hollow and related spoil heaps measuring 14m long and 6.5m wide and 2.5m deep.



Photo 47: View SE towards Feature 34 (1m scale)



Photo 48: View NW towards Feature 34 (1m scale)

Feature 35 – Centred on SN 73396 14359

Partially infilled coal workings measuring 8.5m long and 5m wide.



Photo 49: View west towards Feature 35 (1m scale)



Photo 50: View SE towards Feature 35 (1m scale)

Feature 36 – Centred on SN 73401 14365

Backfilled coal working; measuring 5.7m wide.



Photo 51: View NW towards infilled Feature 36 (1m scale)

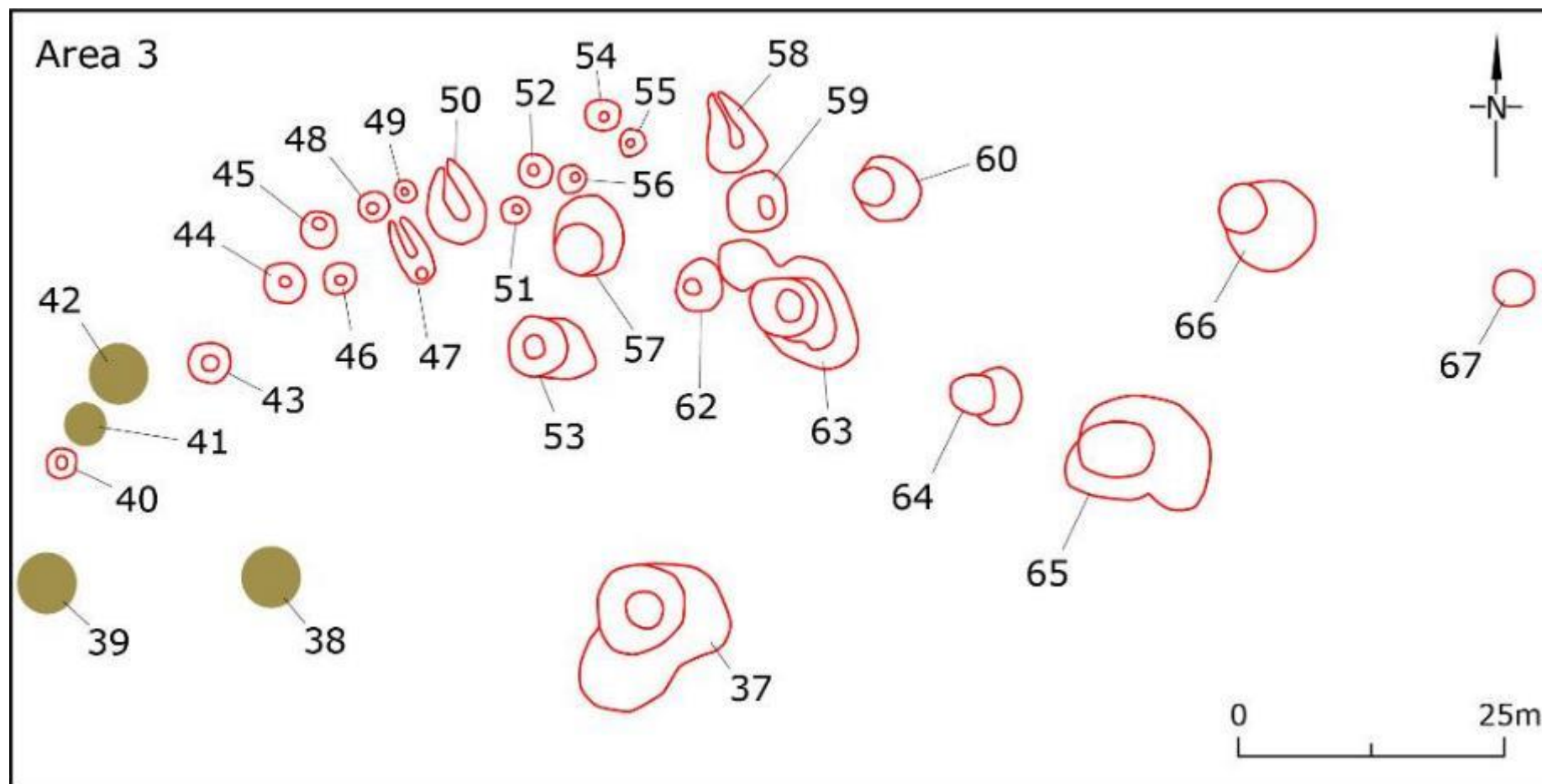


Figure 10: Features surveyed in Area 3

5.5 Area 3 (Figure 10)

Feature 37 – Centred on SN 73465 14356

Former coal working comprising a water filled, 7.8m wide conical shaft and a spoil heap to the SE measuring 15.3m by 7.5m and 1.35m deep. The workings are enclosed by a fence.



Photo 52: View south towards Feature 37 (1m scale)



Photo 53: View east towards Feature 37 (1m scale)

Feature 38 – Centred on SN 73431 14360

Backfilled and fenced off former coal shaft. The shaft originally measured approximately 5.0m in diameter.



Photo 54: View south towards backfilled and fenced Feature 38 (1m scale)

Feature 39 – Centred on SN 73409 14358

Backfilled and fenced off former coal working, measuring approximately 5.0m in diameter.



Photo 55: View north towards backfilled Feature 39 (1m scale)

Feature 40 - Centred on SN 73411 14370

Coal working visible as a small depression approximately 2.5m wide and 1.2m deep.



Photo 56: View NW towards Feature 40 (1m scale)

Feature 41 - Centred on SN 73412 14372

Backfilled coal working measuring 1.2m in diameter.



Photo 57: View north towards backfilled coal working Feature 41 (1m scale)

Feature 42 – Centred on SN 73416 14378

Backfilled coal working measuring approximately 3.5m across.



Photo 58: View north towards backfilled coal workings Feature 42 (1m scale)

Feature 43 – Centred on SN 73424 14380

Coal working visible as a conical hollow measuring approximately 4.0m in diameter and 1.2m deep.



Photo 59: View north towards Feature 43 (1m scale)

Feature 44 – Centred on SN 73432 14387

Coal working visible as conical hollow approximately 4.0m in diameter and 1.6m deep.



Photo 60: View west towards Feature 44 (1m scale)

Feature 45 – Centred on SN 73435 14392

Coal working visible as a conical hollow approximately 2.0m in diameter and 0.65m deep.



Photo 61: View west towards Feature 45 (1m scale)

Feature 46 – Centred on SN 73449 14388

Coal working seen as a conical hollow approximately 2.0m in diameter and 1.0m deep.



Photo 62: View north towards Feature 46 (1m scale)

Feature 47 – Centred on SN 73444 14388

Coal working seen as conical hollow measuring 2.7m across and 0.8m deep, and two linear spoil heaps to the north, approximately 4.0m long.



Photo 63: View north towards Feature 47 (1m scale)

Feature 48 – Centred on SN 73440 14394

Coal working seen as conical hollow approximately 2.5m across and 0.6m deep.



Photo 64: View west towards Feature 48 (1m scale)

Feature 49 – Centred on SN 73443 14395

Coal working seen as shallow hollow approximately 1.5m across and 0.4m deep.



Photo 64: View west towards Feature 49 (1m scale)

Feature 50 – Centred on SN 73448 14394

Coal working seen as teardrop shaped hollow approximately 7.6m long, 5.2m wide and 1.3m deep.



Photo 65: View south towards Feature 50 (1m scale)



Photo 66: View north towards Feature 50 (1m scale)

Feature 51 – Centred on SN 73453 14374

Coal working seen as a small hollow approximately 2.0m wide and 0.8m deep.



Photo 67: View south towards Feature 51 (1m scale)

Feature 52 – Centred on SN 73455 14398

Coal working seen as a small hollow approximately 2.5m wide and 0.9m deep.



Photo 68: View SE towards Feature 52 (1m scale)

Feature 53 – Centred on SN 73459 14390

Coal working seen as a large hollow measuring 4.2m across and 0.65m deep with spoil heap on NE side



Photo 69: View east towards Feature 53 (1m scale)



Photo 70: View south towards Feature 53 (1m scale)

Feature 54 – Centred on SN 73461 14403

Coal working seen as a small hollow approximately 2.0m wide and 0.6m deep.



Photo 71: View east towards Feature 54 (1m scale)

Feature 55 – Centred on SN 73464 14400

Coal working seen a small hollow approximately 2.0m wide and 0.7m deep.



Photo 72: View SE towards Feature 55 (1m scale)

Feature 56 – Centred on SN 73459 14397

Coal working seen as small hollow approximately 2.0m wide and 0.6m deep.



Photo 73: View SE towards Feature 56 (1m scale)

Feature 57 – Centred on SN 73459 14390

Coal working seen as a waterfilled, conical hollow, approximately 4.0m wide and 1.7m deep with spoil heap on NE side. It has been enclosed by a fence.



Photo 74: View south towards Feature 57 (1m scale)



Photo 75: View north towards Feature 57 (1m scale)

Feature 58 – Centred on SN 73474 14400

Coal working seen as a teardrop depression measuring approximately 8.2m long, 7m wide and 1.1m deep.



Photo 76: View NW towards Feature 58 (1m scale)



Photo 77: View east towards Feature 58 (1m scale)

Feature 59 – Centred on SN 73476 14394

Coal working seen as large subcircular hollow approximately 5.8m across and 1.9m deep.



Photo 78: View SE towards Feature 59 (1m scale)



Photo 79: View north towards Feature 59 (1m scale)

Feature 60 – Centred on SN 73487 14396

Coal working seen as subcircular hollow approximately 4.0m across and 0.4m deep.



Photo 80: View east towards Feature 60 (1m scale)



Photo 81: View NW towards Feature 60 (1m scale)

Feature 61 – Centred on SN 73470 14387

Coal working seen as a large hollow approximately 4.7m across and 1.1m deep.



Photo 82: View SE towards Feature 61 (1m scale)



Photo 83: View NW towards Feature 61 (1m scale)

Feature 62 – Centred on SN 73479 14385

Coal working seen as large hollow approximately 4.5m wide and 1.2m deep with spoil heap on north and east sides. It has been enclosed by a fence.



Photo 84: View west towards Feature 62 (1m scale)



Photo 85: View north towards Feature 62 (1m scale)

Feature 63 – Centred on SN 73496 14376

Coal working seen as depression approximately 3.5m wide. Spoil heap on east side.



Photo 86: View SE towards Feature 63 (1m scale)

Feature 64 – Centred on SN 73509 14371

Coal working seen as a large hollow measuring approximately 7.0m across and 1.7m deep. It has been enclosed by a fence.



Photo 87: View east towards Feature 64 (1m scale)



Photo 88: View south towards Feature 64 and spoil heap (1m scale)

Feature 65 – Centred on SN 73522 14394

Coal working seen as circular water filled hollow approximately 4.2 wide and 0.75m deep with spoil heap on east side.



Photo 89: View east towards Feature 65 (1m scale)



Photo 90: View north of Feature 65 showing spoil heap on east side (1m scale)

Feature 66 – Centred on SN 73546 14386

Uncertain if this is a result of coal working, it could possibly be a waterfilled sink hole. It measured approximately 3.6 in diameter.



Photo 91: View NW towards Feature 66 (1m scale)

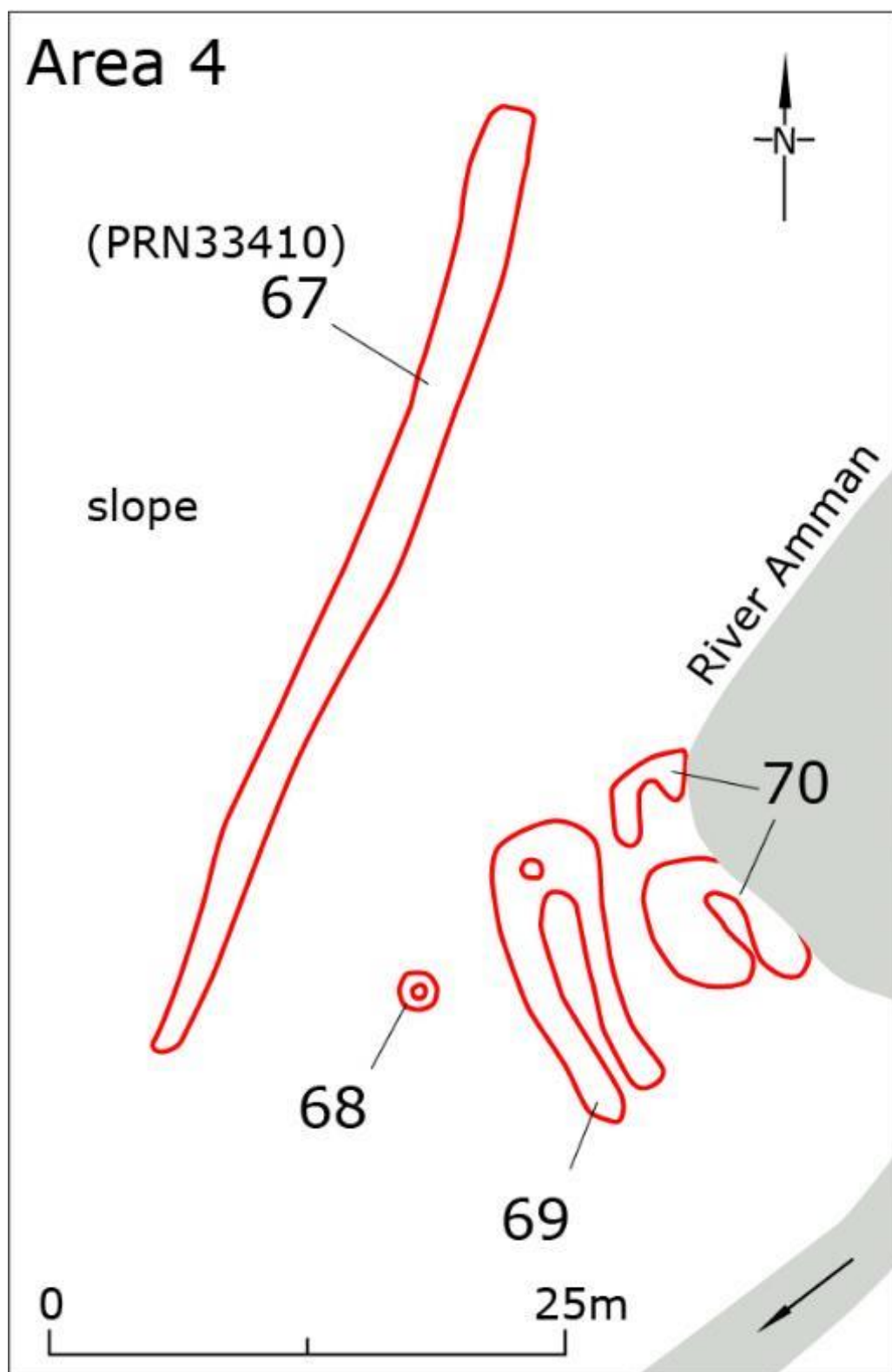


Figure 11: Features surveyed in Area 4

5.6 Area 4 (Figure 11)

Feature 67 - PRN33410 (Centred on SN 73505 14308)

Described as a substantial, possibly unfinished field boundary made of earth and rubble with stone facing on the HER database (PRN33410). This linear feature could equally be a pillow mound. It is 48m long, 1.5m wide and up to 0.4m high.



Photo 92: View east towards Feature 67 (PRN33410) (1m scale)



Photo 93: Detail of stone facing in bank of Feature 67 (1m scale)



Photo 94: View south down spine of bank of Feature 67 (1m scale)

Feature 68 – Centred on SN 73507 14286

Small depression measuring 1.7m across and 0.7m deep. Possibly associated with coal extraction but might be the well shown on the OS 1907 2nd edition map.



Photo 95: View west towards Feature 68 (1m scale)

Feature 69 – Centred on SN 73512 14292

Coal workings seen as two parallel spoil heaps (approximately 10.5 long and 2.5 wide) running downhill from hollow measuring 3.2m diameter and 1.35m deep.



Photo 96: View south down length of Feature 69 (1m scale)



Photo 97: View east towards north end of Feature 69 (1m scale)

Feature 70 – Centred on SN 73518 14296

Coal workings seen as 2.0m wide and 1.3m deep depression and two linear spoil heaps down slope. Coal seam can be seen in riverbank.



Photo 98: View NE towards depression (2m wide) at north end of Feature 70.
River Amman in background (1m scale)



Photo 99: View NW along west spoil heap - east spoil heap partially eroded by
river (1m scale)

7. SOURCES

Published

Huws, L, C, 1942 *'The history of the chapels of Carmel, Gwaun-cae-Gurwen and Tabernacle, Cwmgors'*

Leighton, D, 2012 *'The Western Brecon Beacons: The Archaeology of Mynydd Du and Fforest Fawr'* The Royal Commission on the Ancient and Historical Monuments of Wales.

Cartographic

1906 – Second edition Ordnance Survey 25-inch map of Carmarthenshire

Database

Dyfed Archaeological Trust Historic Environment Record, housed with Dyfed Archaeological Trust in The Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire, SA19 6AE.

Websites

British Geological Survey mapping portal. Accessed on the 11/11/21

