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'Sae lofty and wide': the archaeology of the Clyde Wind Farm

Stephen Cox FSAScot¹ and Nuala Marshall²

with contributions by Laura Bailey,¹ Julie Franklin FSAScot,¹ Fraser Hunter FSAScot³ and Angela Walker¹

Author contact

steve.cox@headlandarchaeology.com

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- 1 Headland Archaeology (UK) Ltd, 13 Jane Street, Edinburgh EH6 5HE
- 2 AOC Archaeology Group, Edgefield Rd, Loanhead EH20 9SY
- 3 Department of Scottish History & Archaeology, National Museum of Scotland, Chambers Street, Edinburgh EH11JF

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1. ABSTRACT

Archaeological investigations undertaken by Headland Archaeology (UK) Ltd as part of the Clyde Wind Farm and Clyde Wind Farm Extension construction project produced a body of evidence that tells the story of human occupation and settlement in the Upper Clyde Valley. The investigations conducted between 2007 and 2015 included evaluations, site excavations, and the monitoring of groundworks across four distinct landscapes: Clyde Valley North (Woodend), Camps Valley, Midlock Valley, and Clyde Valley South (Newton Plantation). The results of this work, together with those from specialist studies and scientific analyses, have allowed for a range of key research questions to be addressed. These include an exploration of prehistoric upland activities, the role of pits and special places, and the development of settlement patterns and structures. Evidence for mobile Mesolithic and Neolithic communities was identified across the landscape with indications of the repeated visitation of specific locations. The role of pits in the creation of special places was particularly evident across Camps and Midlock Valleys. In the 2nd millennium BC, the hillsides were transformed by the creation of platform settlements. Enclosed settlements and hillforts appeared along the banks of the Clyde Valley in the 1st millennium BC marking a distinct shift in the role of landscape in expressing status and identity. In addition to prehistoric remains, limited evidence of early historic metalworking and medieval rural settlement was uncovered. Across all landscapes and periods, the themes of transition and transformation came to the fore, painting an increasingly dynamic picture of life in the Upper Clyde Valley. The scale and complexity of the archaeological works also allowed for a review of current methodologies, including the role of an Archaeological Clerk of Works, with implications for future strategies.

2.1 Outline of Works

This paper presents the results of archaeological investigations undertaken between 2007 and 2015 as part of the Clyde Wind Farm and Clyde Wind Farm Extension construction project (Illus 2.1). Teams of archaeologists undertaking evaluations, site excavations, and the monitoring of groundworks uncovered a wide variety of archaeological features from discrete pits to roundhouses and retrieved artefacts from Mesolithic worked flint to medieval pottery sherds. The excavations revealed evidence of human activity spanning over eight millennia located across a varied landscape from the valley floors to the ridgelines of the hills. The results of the site works together with the results of specialist studies and scientific analyses have produced a body of evidence that tells the story of human occupation and settlement in the Upper Clyde Valley and makes a significant contribution to the corpus of archaeological knowledge for the region.

2.2 Project Background

Clyde Wind Farm was given planning permission in 2008 and is one of the largest consented terrestrial wind farms in Europe with a total generation capacity of 350MW. The project was approved by the Scottish Government and formed an important part of its aim to produce 50% of the country's total energy from renewable sources by 2020. The site comprises 206 turbines (152 turbines on Clyde Wind Farm and 54 on Clyde Extension) and covers an area of 47.5 sq km, encompassing the northern fringes of the Southern Uplands either side of the Clyde Valley within South Lanarkshire and the Scottish Borders Council regions (Illus 2.2).

Following production of an Environmental Impact Assessment (EIA), Headland Archaeology (UK) Ltd undertook a programme of archaeological survey, evaluations, excavations, monitoring, and avoidance through design at Clyde Wind Farm prior to and during construction between 2007 and 2012. The construction of the wind farm was divided into three sections: North, Central, and South. The contracts for construction of each section were awarded to a different civil engineering contractor, with each contractor engaging sub-contractors to carry out various aspects of the project, resulting in a considerable degree of communication between stakeholders. These aspects included the construction of substations and turbine platforms; access tracks (Illus 2.3) and site compounds (some of which were permanent, some temporary); the stripping of peat and topsoil; the installation and realignment of service trenches; the laying of subterranean power cables and the construction of drainage ditches. All the groundworks associated with these activities carried the risk of disturbance to archaeological remains. Consent for an extension to the Clyde Wind Farm was given in July 2014 and a further programme of similar works took place between 2015 and 2016 prior to and during construction.

The overarching aims of all archaeological works within the wind farm were tied to two planning conditions attached to the consent for the original wind farm, and a single condition for the extension. The planning conditions aimed to minimise adverse impacts on archaeology on the site and to preserve by record any archaeology identified. Putting the conditions into practice on a project of this nature with the challenges of the size of the scheme, the nature of the topography, the inclement Scottish weather, and constraints of logistics, was not straightforward. One of the conditions specified the role of an Archaeological Clerk of Works (ACoW), one of the first times such a role had been employed on a construction project in Scotland. This job involved co-ordinating a variety of archaeological works from monitoring the stripping of topsoil and peat, to excavations, to providing input into ongoing design decisions with respect to archaeological site avoidance and protection. The ACoW had to ensure that the developer met their obligations towards the archaeological resource, as well as liaise with various stakeholders on the project, from contractors to Planning Authority advisors.

2.3 Physical and Environmental Context

The Southern Uplands form one of the three major geographic areas of Scotland (the others being the Central Lowlands and the Highlands). They are characterised by rolling hills and valleys with fertile haughs, and extensive river systems that include both the third and fourth longest rivers in Scotland



infrastructure outline

Illus 2.1 Site location. (© Headland Archaeology (UK) Ltd)



Illus 2.2 Clyde Wind Farm and extension. (© Headland Archaeology (UK) Ltd)



Illus 2.3 View south of topsoil stripping for access road on southern side of Midlock Valley. (© Headland Archaeology (UK) Ltd)

- the River Tweed and the River Clyde. The sources of these two rivers are only 10km apart, separated by hills on which the southern part of the wind farm sits. These river basins and catchment areas are the result of the Pleistocene glaciations whose erosive actions are responsible for the smooth rounded steep-sided hills that we see today. The periglacial conditions led to freeze-thaw activity on the relatively soft rock which produced loamy and sandy material covering the hill summits and upper slopes, while the valley floors and lower hill slopes in general comprised thick clay deposits formed initially through the release of meltwater after deglaciation and modified by the actions of the rivers and streams into flood plains. The wet conditions immediately following the retreat of the glaciers stimulated the build-up of peat deposits which, as the climate changed and anthropogenic effects of drainage and overgrazing took hold, have widely dried out and eroded away (Stone et al 2012).

The lower slopes and valley floors have seen much alteration over thousands of years of human occupation. Power generation is the most recent example of commercial exploitation of the land, which has also included forestry plantation and reservoirs, quarrying and mining, rough grazing, stock rearing, and cultivation. The good agricultural land in Upper Clydesdale is limited to the valley floors which within the project area vary from 220m above ordnance datum (AOD) in the northern part of the Clyde Valley to 300m AOD at the Camps, Midlock, and Daer Waters. The latter represents the limits of improved fields with the quality of the land changing on the upper slopes of the valleys to unimproved rush-infested pastures which continue to the ridgelines and hilltops.

The hills of the Southern Uplands have formed a major obstacle to passage between the central belt of Scotland to the north and England to the south ever since humans first began making their way across the landscape. Since prehistory the valleys of Upper Clydesdale have been an important routeway and historically they have provided access for Roman and medieval armies, as well as more recent railways and motorways.

The project area of the wind farm and the wind farm extension was located on a range of hills between the upper reaches of the River Clyde to the west and River Tweed to the east with almost all construction taking place within the watershed of the Clyde. The steep-sided valleys contained tributaries of the Clyde such as Wandel Burn, Camps Water, Midlock Water, and Daer Water.

An advantage of the scale of the project was that the linear elements of the works (for example cable-laying and road construction) provided an opportunity to examine large transects across the landscape. In the case of the Midlock and Camps Valleys these transects ran from the top ridge of the valley down the slope, across the valley floor and up the other slope to the opposite ridge. This permitted an examination of the distribution, typology, and date of archaeology found within a slice of the entire valley system. Each valley itself from ridgeline to ridgeline comprises a landscape unit, a space defined not only by its physical topography but also by the human interactions with the land between the ridgelines. The study of the evidence of human engagement with the land reveals a cultural environment, as well as a physical one.

2.4 Strategy

A systematic approach to the groundworks within the project area was required given the magnitude of the construction project and the expanse of the landscape in which it was set. A strategy of dividing the landscape into zones of archaeological potential was devised in which different archaeological responses were provided to each zone. The zones were differentiated based partly on altitude and partly on the specific archaeological potential of certain areas.

Zone 1 comprised the valley floors and was the area with the highest potential for sub-surface archaeological remains to be uncovered. Zone 2 comprised the lower slopes of the valleys where most known archaeological sites consisted of upstanding remains and fewer previously unknown sites were expected to survive below the ground. Zone 3 comprised the hilltops and ridgelines where, in general, the archaeological remains have substantial physical elements to them which have not been disturbed in later periods. It was considered unlikely that unknown archaeological remains would exist sub-surface in Zone 3 so during construction an archaeologist visited the zones regularly to check if any remains were present (Illus 2.4). In Zone 2 all topsoil stripping for construction was undertaken by mechanical excavators under the direct control of an archaeologist, while a more proactive approach was adopted in Zone 1 with archaeological trial trenching identifying major remains prior to construction, and monitored topsoil stripping during groundworks followed by excavation where appropriate. The total area of archaeological excavation amounted to 11.76 hectares.

2.5 Archaeology of Upper Clydesdale

2.5.1 Summary of Archaeological Background

The Upper Clyde Valley and its environs are at the heart of southern Scotland and have been a focal point throughout history for settlement and migration. This is an area rich in archaeological remains spanning millennia from the Mesolithic through to the post medieval periods. The density of recorded heritage in this area is due in no small part to the archaeological surveys conducted by the RCAHMS and the Biggar Archaeology Group, in particular the survey carried out in advance of the M74 construction project (Ward 1992).

Early prehistoric human activity leaves few traces but evidence of the Mesolithic is attested at Daer Valley just south of the project area where investigations by the Biggar Archaeology Group between 1990 and 2012 recorded the presence of Mesolithic camps in the form of lithic scatters, charcoal spreads, and pits (Ward 2017). These surveys and excavations have provided valuable insights into the nature of Mesolithic activity particularly in upland locations (that is above 300m AOD; ibid: 47). The transition from the Mesolithic to the Neolithic is highly debated (see Thomas 2013, Rowly-Conwy et al 2020) with only a limited number of sites in the region, such as Biggar Common, Daer Valley, and Blackshouse Burn, dating to this period. More substantial remains were left by Late Neolithic people in the form of ritual monuments such as the Class II henge (Normangill Henge – Canmore ID <u>47386</u>) located on the floor of Camps Valley, which is one of the best upstanding monuments of this type in Scotland, but evidence of Neolithic settlement is often scarce and difficult to identify with pits being a key resource.

In the Bronze Age the remains of domestic settlements begin to appear in the landscape along with evidence of ceremonial activities. The latter comprises for the most part upstanding remains such as barrows, burnt mounds, and burial cairns and includes the two enclosed cremation cemeteries (Canmore IDs 47394 and 74516) located in Camps Valley. Visible evidence of domestic settlement within the project area and the immediate surrounds comprises a large number of artificial platforms excavated into the hillsides. The act of excavating a scarp into a slope and casting the material into an apron to create a platform for a roundhouse is known from south-west England to Sutherland in northern Scotland and for the most part can be interpreted as a reaction to local topography. The densest concentration of artificial platforms lies in the borders of Scotland and particularly the Clyde and Tweed Valleys where they are thought to be Bronze Age in date. Here the platforms are grouped together in lines and clusters to form settlements that represent clear entities - a characteristic not seen elsewhere in Britain. Some appear to be found in association with clearance cairns that are indicative of agriculture, otherwise very little in the way of upstanding evidence for field systems is known. Nearly 60 individual platforms are recorded on the northern and southern slopes of Midlock Valley alone, demonstrating extensive settlement overlooking the river there in the 2nd millennium вс.

Late prehistoric evidence abounds in the Clyde Valley with a number of Iron Age enclosures and hillforts lining the slopes above the river (Lock



Illus 2.4 View of compound area by White Gill Wood, above Whelphill taken during ACoW check. (© Headland Archaeology (UK) Ltd)

& Ralston 2017). These include the hillforts at Bodsberry Hill (Canmore ID 47288) and Devonshaw Hill (Canmore ID 47343) and the enclosures at Woodend (Canmore ID 47355) and Hillend (Canmore ID 47370). Following their arrival in the late 1st century AD, Roman armies would have marched past these hillforts as they advanced north and they left behind evidence of their occupation in the form of forts and camps, such as Wandel (Canmore ID 47371), and roads (such as Canmore ID 71654), which are today overlain in places by modern roads and farm tracks.

The remains of agricultural activity dating back to the medieval period are still visible in the landscape; across much of the sloping ground in the Clyde and Midlock Valleys extensive areas of rig and furrow cultivation are known from aerial photos and LiDAR (National Library of Scotland 2022). The varied alignment of the rigs, along with other agricultural elements such as field dykes, would suggest more than one phase of farming is represented.

2.5.2 Summary of Archaeology Uncovered During Construction

The archaeological remains uncovered during the wind farm project revealed evidence of human activity from the Mesolithic through to the mid-2nd millennium AD. For the purposes of this publication, they are divided into four loci (named in bold below) based on the landscape in which they were uncovered (Illus 2.2). The most northerly

excavated area, **Woodend**, was located on a gravel terrace 300m east of the River Clyde north of Wandel Burn – a minor tributary of the Clyde. Here the development clipped the perimeter of a double ditched cropmark known from aerial photographs. The field team excavated both ditches and uncovered a probable concentric palisade trench. The broadest ditch appeared to have had a bank on its inner edge and several features including post-holes forming a structure were excavated within the interior. Finds of industrial waste and lithics were recovered from the fills of the features and the site is interpreted as an Iron Age enclosure.

Forty-eight features were excavated within **Camps Valley**. The features comprised charcoal rich pits, all around 1m metre in diameter, from which samples of charcoal provided radiocarbon dates from the Mesolithic to the Iron Age. Shallow spreads and arcs of post-holes were also recorded, which hint at longer and more substantial occupation.

A greater density of features was uncovered within Midlock Valley immediately south of Camps Valley. On the northern side of the valley four Bronze Age roundhouses forming part of an extensive unenclosed platform settlement (UPS) were excavated along with several features that date to earlier and later phases. The southern slope contained a scatter of features including a pit containing fragments of a Bronze Age Cordoned Urn. An Iron Age roundhouse and two long enclosures were excavated south of the river at the base of the southern slope. The valley floor had a concentration of pits some of which contained significant quantities of iron slag and were dated to the early historic period. The remains of a medieval structure were found immediately to the south of the UPS. Further up the slopes a scatter of features was uncovered.

The most southerly excavated area, **Newton Plantation**, was located on the banks of the Clyde south of the Camps and Midlock Valleys and comprised an insubstantial collection of features. They are interpreted as the remains of a post fence of Iron Age date with associated pits that provided evidence of non-ferrous metalworking.

In addition to the excavations, a single environmental core sample was taken at a small wetland area in Camps Valley (the location is shown in Illus 4.2). Twenty pollen samples were taken from the core and two charcoal samples were sent for

radiocarbon dating. The aims were to reconstruct the former regional woodland; to identify evidence of human-environmental interaction (such as cereal and/or pastoral farming and woodland clearance); and to establish the chronology of any disturbance events and peat accretion. One of the key aims was to identify what arboreal taxa would have been around in the prehistoric and later periods which could have been used for wood fuel, and to see whether the dearth in oak charcoal in the environmental samples collected from the excavations was a true reflection of a lack of oak in the landscape or a product of other trees being favoured over oak to provide wood fuel. Unfortunately, the sequence recovered did not provide information from earlier than the Late Bronze Age.

The results of the analysis are detailed in the specialist report (Timpany 2015) but in summary the interpretation of the pollen core showed that during the Late Bronze Age the landscape comprised largely open wet grassland with some heath cover. Scrub woodland was present consisting mainly of birch and hazel with scattered pockets of alder, ash, and willow in wetter areas and oak, pine, elm, and rowan elsewhere in the landscape. There was a two-stage loss of woodland, firstly in the early historic period, and secondly in the medieval period. Areas of heathland were present at the beginning of the peat accumulation in the Late Bronze Age. These areas expanded during the Iron Age then declined in modern times. Three main phases of cereal cultivation were recorded; first barley cultivation was identified in the Late Bronze Age along with mire burning, which may have been to encourage the presence of browse for grazing animals. It appears that there was a possible abandonment of farming activity in the area around the Late Iron Age. The second phase dates to the early historic period with the sporadic occurrence of barley pollen coinciding with the loss of woodland. The early historic period was also shown to have experienced a period of increased wetness which may signify a more wide-scale climatic change. The third phase dates to the medieval period and sees a switch from barley to oats along with evidence for arable farming, coinciding with the second loss of woodland. The results of the pollen work have been woven through the following chapters.

2.6 Research Questions

Potential research objectives were identified following the excavation phases of works and were tied into period-specific research agendas as laid out in the Scottish Archaeological Research Framework (ScARF 2012a, 2012b, 2012c, 2012d, 2012e). These are summarised below by landscape unit:

Woodend – How does the site sit in the landscape and how does it relate to the Roman road to the west and Iron Age hillfort to the north? How does the site add to the corpus of known enclosed settlements? Are there domestic and/or metalworking activities on site?

Camps Valley – What activities are represented by the features? Can these activities be classed as domestic or ritual or both? Is the use of the features temporary, seasonal, or permanent? How do they relate to the Normangill Henge? Given the presence of features above 350m OD does this change current thinking on where Neolithic activity was located?

Midlock Valley (Neolithic and Bronze Age) – How do the earlier features compare with the discoveries from Camps Valley? Are the platform structures in use at the same time, or is there a sequence of development? Can specific activities at different platforms be identified? What is the relationship between this site and sites south of the river? What is the importance and relevance of the earlier and later features?

Midlock Valley (Iron Age) – What is the relationship between the roundhouse and the enclosure? How do they relate to the features further up the hill? Does Midlock Water represent a dividing line between a space for domestic activity and a space for ceremony?

Midlock Valley (early historic) – At what scale is the activity taking place?

Newton Plantation –What can the results of the excavation say about the nature of Iron Age settlement in the area? How does it compare with nearby Iron Age evidence?

Considering the landscape as a whole in general – What different landscape units are present? How do they fit within the broader landscape of the Upper Clyde Valley? Is the landscape divided by specific periods or certain types of site? What are the advantages and disadvantages of the strategy for this type of development programme?

2.7 Organisation of Report

This publication comprises a synthesis of the assessment reports and incorporates the results of the specialist finds and environmental analysis (the assessment reports and analysis are contained in the site archive which will be deposited with NHRE and the specialist contributors are acknowledged in section 8). It is organised by landscape starting with the northernmost discoveries and moving south; as already noted, four distinct landscape units are identified, comprising Clyde Valley North (Woodend), Camps Valley, Midlock Valley, and Clyde Valley South (Newton Plantation). The contrast between each unit is not just topographical but archaeological. Camps and Midlock Valleys both appear to be enclosed with steep sides forming almost a bowl shape whereas the valley of the Clyde near Wandel Burn is more open with gently sloping sides. Camps and Midlock Valleys are on either side of one ridgeline but contain contrasting archaeological remains.

Each chapter is devoted to a landscape unit. Following a section introducing the landscape unit and the excavation areas, the text details the material used for dating including radiocarbon dating. The state of knowledge regarding the relevant archaeology of each landscape unit prior to the investigations is summarised. The chapter then describes the archaeological remains uncovered, provides a synthesis of the environmental and finds analysis, and pulls together a discussion of the results. Tables showing the details of the radiocarbon dates for the excavated areas are included in each chapter, although an overview of the dating is provided below. The final chapter discusses the results in the context of the landscape and also offers some thoughts on the approaches used during the project for managing the archaeological resource.

The ACoW role was undertaken by six different archaeologists over the eight-year period of construction and the principles used for numbering the sites and features went through an evolutionary process that made sense at the time. In general, the first digits of a context number reflect the internal job code assigned to the phase of the project (for example 13) followed by a hyphen and the number assigned to the context (thus C13-0008).

2.8 Dating

Dating of features was based on the analysis of artefacts recovered from the fills of the features combined with a programme of radiocarbon dating. Almost 1,500 contexts were recorded during the project and 638 environmental bulk samples were taken. The main objective of the radiocarbon dating programme was to obtain dates for the majority of the structures and significant features in order to produce a chronological framework for the different sites. Environmental material such as charcoal fragments, burnt bone, and in one case residue from a pottery fragment was selected for radiocarbon dating with primary deposits, for example hearths, areas of in situ burning, and deliberately deposited contexts being prioritised for analysis. In some instances, samples containing suitable material but with less contextual security were selected for radiocarbon dating in order to allow a broad range of features to be potentially dated and chronologically compared. The material dated and the contextual security of the dates is explored within the feature descriptions. A total of 52 radiocarbon dates were obtained, each providing a single date for the feature selected. The relevant results are presented in tables within each chapter and Illus 2.5 shows the calibrated dates in a timeline produced from the collation of those results. All dates were calibrated using OxCal v4.3.2 (Bronk Ramsey 2017); r5; IntCal 13 atmospheric curve (Reimer et al 2013) with endpoints rounded outwards by 5 for those presented in text (following Mook 1986).

The timeline covers the periods from *c* 7000 BC to AD 1400 with apparent breaks between c 6000 and 4000 BC and *c* 1200 and 200 BC (only one date falls between the latter pairing). This wide span of activity is a result of the scale of the project area and reflects the most likely prehistoric and historic periods to be uncovered during archaeological investigations of a substantial swathe of the Scottish landscape. It also results from the random (from an archaeological perspective) nature of the construction process in that the excavation areas were not selected by archaeologists but were the result of decisions made by the design of the scheme. The dating shows that at most sites (except Newton Plantation – Chapter 6) there was a sequence of repeated returns to the same location.

This publication uses the following breakdown and terminology of chronological periods: Mesolithic (12700 – 4100 BC), Early Neolithic (4100 – 3500 BC), Middle Neolithic (3500 – 3000 BC), Late Neolithic (3000 – 2500 BC), Chalcolithic (2500 – 2200 BC), Early Bronze Age (2200 - 1550 BC), Middle Bronze Age (1550 - 1150 BC), Late Bronze Age (1150 - 800 BC), Early Iron Age (800 - 100 BC), Late Iron Age (100 BC - AD 400), early historic (AD 400 - 1100), medieval (AD 1100 - 1500), and post medieval (AD 1500 - 1750).



Illus 2.5 Plot of radiocarbon determinations in the form of an AMS timeline for Clyde Wind Farm. (© Headland Archaeology (UK) Ltd)

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3.1 Introduction

Located on the lower slopes of the eastern side of the Clyde Valley the excavation area at Woodend rises from a height of 228m AOD adjacent the A702 public road to some 240m AOD on the gently sloping crest of a knoll. The River Clyde lies to the north-west, while two minor tributaries, the Woodend Burn and the larger Wandel Burn, are located north and south respectively. The excavation area measured around 0.16ha (Illus 3.1) and included a double ditched enclosure on the knoll and probable Roman quarry pits lying to the east of the road. Both the quarry pits and the enclosure lie in an area that had been improved by cultivation, and they were previously known only from cropmarks and parchmarks on aerial photographs. The excavation confirmed the presence of the double ditched enclosure and one of the quarry pits, as well as evidence of internal structures within the enclosure. It improved understanding of the layout of the enclosure and provided a date for the remains, however, much of the enclosure survives unexcavated to the south-east of the wind farm construction.

3.1.1 Radiocarbon Dates and Dating

Radiocarbon dates were obtained from material recovered from four features and all four dates fell within the Late Iron Age (Table 3.1). Both the earliest dated sample and the latest dated sample were from deliberately deposited fills of pits within the enclosure. The other two dated samples were from the fill of a palisade gully and the primary fill of the interior ditch; the dates indicate that the gully belonged to an earlier phase of activity than the ditch but since both deposits were the result of natural erosion, they are therefore less secure in providing a date for those features. However, the radiocarbon dates should be treated with some degree of confidence in terms of providing a broad indication of the main phase of activity. The artefactual evidence consisted of Mesolithic worked chert and hammerscale from metalworking. The typology of the features and the presence of metalworking evidence were all indicative of an Iron Age date which was further supported by the radiocarbon dates. The Mesolithic material provided evidence of a much earlier phase of activity.

3.1.2 Background

This section of the Clyde Valley is rich in archaeological sites (Illus 3.2) few of which have been subject to excavation. Two main periods of known activity are represented: the late prehistoric/ Roman and the medieval to post medieval period. The sites on the floor of the Clyde Valley have been denuded by cultivation and are mostly known through aerial photographs. Some may represent settlements of Iron Age date such as the four penannular ring ditches (Canmore ID 47348) 800m north of Woodend, the possible palisaded enclosure (Canmore ID 47346) recorded on the lower northern slopes of Devonshaw Hill, and the two curvilinear parchmark enclosures (Canmore ID 269160) nearby. Others such as the potential ring ditches to the west of the Clyde (Canmore ID 83934) are so nebulous that they cannot be assigned a date.

Two cropmark enclosures (Canmore ID 47370) are recorded on the left bank of the Clyde at Hillend, 650m west of the site. The

Lab Code	Context No	Material	Radiocarbon Age вр	Radiocarbon Date (95% probability)
SUERC-58792	10-0066	Burnt bone	2048±28	165 cal вс–cal ад 20
SUERC-58791	10-0018	Burnt bone	1975±24	40 cal вс–cal AD 75
SUERC-58790	10-0037	Charcoal: Alnus glutinosa	1912±27	cal AD 20–210
SUERC-58793	10-0062	Charcoal: Corylus avellana	1885±29	cal AD 60–220

Table 3.1 Radiocarbon determinations from Woodend



Illus 3.1 Location of site at Woodend. (© Headland Archaeology (UK) Ltd)

sub-rectangular enclosure may represent an Iron Age settlement. The circular enclosure has been tentatively interpreted as the remains of a henge and excavations nearby produced fragments of Grooved Ware pottery.

The sites on the slopes and hilltops are visible as upstanding remains such as the two possible burial cairns – one on the summit of Devonshaw Hill (Canmore ID 47359) the other 500m to the east (Canmore ID 47353). Other upstanding remains include the enclosure north of Devonshaw Hill summit (Canmore ID 47358) and the earthwork south of the summit (Canmore ID 47352), the possible burnt mound on the banks of Wandel Burn (Canmore ID 89186) and a small D-shaped earthwork at Shiel Burn (Canmore ID 47357).

One of the most distinctive sites is the hillfort on the upper slopes of Devonshaw Hill (Canmore ID 47343), which lies around 500m north-east of Woodend. It overlooks the investigation area and has wider views over the Clyde Valley to the north and south. Two other defensive features, a Roman fortlet and a temporary camp (Canmore ID 47371) which are believed to relate to early conquest activity possibly during the Flavian period (Jones 2011: 112), lie 1.75km to the south-west of Woodend. A medieval tower house, the Bower of Wandel (Canmore ID 47354), lies 600m north of Woodend, immediately on the River Clyde. One hundred metres to the west of Woodend lies the A702 which at this point runs along the route – and probably directly over any remains - of the Border-Crawford-Inveresk Roman Road (Canmore ID 71654); the possible quarry pits lie to the east of this road.

Extensive areas of rig and furrow have been identified in aerial photos and LiDAR located across much of the sloping ground forming the south-western and western sides of Woodend Hill (Canmore ID 73499), and the southern slopes of Devonshaw Hill (Canmore ID 73428). Many sections of the rig and furrow which could date to the medieval or post medieval periods remain clearly visible on the ground. The varied alignment of the rigs, along with other agricultural elements such as field dykes, would suggest more than one phase of farming is represented.

3.2 Archaeological Results

The landscape unit was investigated during works to create an access track, compound area, and car park. Large sections of the monitored works were devoid of archaeology, but a knoll measuring 85m by 25m, occupied by the cropmark of the doubleditch enclosure, proved to be a focus of activity. The presence of the enclosure was initially confirmed through trial trenching and then explored during topsoil stripping prior to construction works. Although the initial intention was to fully excavate the remains, time constraints and the fact that the compound was intended to be a temporary construction resulted in a proposal to preserve the features in situ by covering the archaeological remains with geotextile and building up the ground surface with stone to provide a platform for site offices. A sample excavation was undertaken prior to the geotextile being laid, with slots excavated through the features to gain an outline understanding of the site.

Works during the wind farm extension comprised further building up of material to extend and improve the extant compound area, and the excavation of additional cable and drainage trenches. Only one pit feature was recorded during these works, with the majority of cable and drainage trenches being contained within the built-up ground. Following completion of the construction works for the extension, the ground level around the compound platform was filled in and regraded to provide a profile in keeping with the original knoll. It should be noted that the extant remains of the site still survive below the current ground surface, under the built-up ground and a layer of geotextile.

3.2.1 Defences

Two concentric ditches and an interior gully were identified, forming part of the north-west arc of the enclosure (Illus 3.3) previously identified by aerial photography. The interior ditch was the larger and most visible feature within the excavation. The exposed segment measured c 60m long and was up to 5.4m wide and 1.7m deep. Towards the northeast, the width of the ditch narrowed substantially, where the cropmarks show it turning along the edge of a shallow natural gully. The profile of the



Illus 3.2 Plan of known heritage assets around Woodend. (© Headland Archaeology (UK) Ltd)



Illus 3.3 Plan of features at Woodend. (© Headland Archaeology (UK) Ltd)



Illus 3.4 South-west facing section of interior ditch. (© Headland Archaeology (UK) Ltd)

ditch (Illus 3.4) consisted of a steeply sloped inner (south-east) edge, and a slightly less steep outer edge. A narrower, steeper section was present along the base of the ditch which was somewhat flat and about 0.6m wide. In at least three of the slots excavated, the geological subsoil on the inner edge was at a higher level than the outer (that is, over 0.7m difference between the level of subsoil at the outer and inner edges in slot 10-0028), reflecting the original sloped profile of the ground through which the ditch was dug.

The sequence of deposits seen in all four slots was relatively similar. The ditch was filled with deposits representing silting and erosion from the inner edge



Illus 3.5 View east of slot through interior ditch. (© Headland Archaeology (UK) Ltd)

(for example Context 10-0010 and C10-0011; Illus 3.4). A fragment of alder charcoal retrieved from the primary fill of one of the ditch slots produced a radiocarbon date of cal AD 20–210 (95% probability; SUERC-58790). These deposits were overlain by two layers of clayey silt which contained substantial amounts of large unworked stone rubble (Illus 3.5). The tip lines of these deposits indicated they had originated from inside the enclosed area. Above this were comparatively thin layers of stony silt, not too dissimilar to the topsoil across the site and likely the result of erosion of the topsoil post-abandonment of the site.

The fact that the deposits within the ditch largely slope from the inner to outer edge, along with the presence of extensive rubble deposits following the initial weathering of the ditch edges, points to the presence of a bank on the inner edge of the ditch. The thickness of the rubble deposits and the lack of weathering from the outer edge suggest that the bank material entered the ditch over a short period of time. The form the bank took is not clear. If its purpose was a display of ostentation or defence, then the material used to create the bank might be expected to possess some structure, such as a stone foundation with an earthen cap or an outer stone wall with a rubble and earth core, but the evidence here is inconclusive.

A narrow gully was identified (Illus 3.3) lying between 6m and 7.5m within the interior ditch, seen for just under 30m and with a defined terminal at the north-east end. The gully survived to a depth of nearly 0.5m where it was best preserved and had steep sides and a curved base. Several moderately



Illus 3.6 View north-east / south-west of section of palisade. (© Headland Archaeology (UK) Ltd)

sized angular stones were found which may have acted as packing stones (Illus 3.6), with the gully forming the foundation of a wooden palisade. A fragment of burnt bone recovered from the gully produced a radiocarbon date of 40 cal BC-cal AD 75 (95% probability; SUERC-58791). Two post-holes (C10-0021 and C10-0023) were also recorded close to the palisade gully, one immediately outside the north-east terminal and the other further to the west on the interior side. Both were of a similar size and depth. The posts in these holes on either side of the palisade could have provided structural support to the uprights, perhaps indicating repairs to part of the palisade during its lifetime. A short, curved section of gully, C10-0053, was recorded running perpendicular to the interior ditch (the stratigraphic relationship between the two was not determined). The profile of this section of gully (Illus 3.7) is similar to the profile of the internal gully, with steep sides, a curved base and a definite terminal. It appears that together they form the entrance to a palisaded enclosure of which the northern side has been eliminated by the interior ditch.

The exterior ditch of the hillfort was only seen during evaluation although the line of it can be extrapolated from aerial photographs. The ditch was seen in two trenches and appeared to be increasingly truncated toward the north. The ditch was concentric with the interior ditch and lay around 3m outside it. It was up to 1.9m wide and 0.5m deep with moderately steep sloping sides and a rounded base. Like the interior ditch, the level of



Illus 3.7 South-facing section of gully C10-0053. (© Headland Archaeology (UK) Ltd)

the geological subsoil on the inner edge was higher than that of the outer. It was filled with a single deposit of light brown sandy silt with no evidence of the rubble deposits seen within the interior ditch, suggesting that there was no corresponding bank on the inside edge.

3.2.2 Internal Features

Within the enclosed area 14 pits and post-holes were identified. At least three of the post-holes were set on an arc with a projected diameter of a little over 6m and probably formed part of a structure, which extended beyond the limits of the excavation to the south. These all contained packing stones and were around 0.3m deep. A pit was also identified within the structure during the wind farm extension works, but was only recorded in plan, so its specific function is unknown.

Pits made up most of the remaining features, with a small group of heavily truncated post-holes close to the structure (C10-0055, 10-0057, and C10-0059). Of greater interest was C10-0061 (Illus 3.8a), a pit which contained vitrified material indicative of ironworking. The range of waste material recovered specifically indicates blacksmithing, and the quantities found imply that it was taking place in the immediate vicinity of the pit. No clear evidence was found to indicate the pit had been used as a hearth. It lay within a few metres of the structure, and it is possible the structure was associated with smithing and that the surrounding features relate to it. A fragment of hazel charcoal within pit C10-0061 produced a radiocarbon date of cal AD 60-220 (95 % probability; SUERC-58793), broadly contemporary with the dates from the interior ditch and the palisade gully.

South of pit C10-0061 were two intercutting features – a pit, C10-0065, and a post-hole, C10-0063 (Illus 3.8b). The stratigraphic relationship between them could not be ascertained due to the similar nature of the fills and the presence of stones at the interface between the features. The fills of these features were of more interest, containing a wider mix of charcoal than



Illus 3.8 (a) South facing section of pit C10-0061; (b) West facing section of pit C10-0065 and post-hole C10-0063. (© Headland Archaeology (UK) Ltd)

the pits and post-holes immediately surrounding them. In addition, the fills contained a great many fragments of burnt bone; one of which was radiocarbon dated to 165 cal BC-cal AD 20 (95% probability; SUERC-58792). These fragments were so small they could not be identified to species, but were present in substantial quantities not only in this pit, but in post-hole C10-0042 belonging to the structure, which lay immediately to the east, and also in one of the sections excavated through the palisade. It is probable that the burnt bone was contained within the material used for packing the post-hole and the palisade, and that whatever activity was taking place to produce such quantities of burnt bone it was largely focused around the structure.

3.2.3 Other Features

Two other features were located in the excavated area but outwith the settlement. The first was a large shallow feature, C10-0068, identified towards the base of the hill. Half the entire lithic assemblage from this area of the investigations was recovered from the feature, and it may represent a natural hollow whose fills resulted from hillwash. It is not thought to be connected directly to the hillfort, and the deposit itself remains undated, but it is notable that the presence of a considerable amount of lithic material would suggest Mesolithic activity somewhere in the immediate vicinity. The second feature was a large pit, C03-0003 (Illus 3.1), which was found during the evaluation phase of the excavation located 80m west of feature C10-0068. It is most likely to be a gravel quarry associated with the construction and maintenance of the Roman road.

3.3 Finds Synthesis

Julie Franklin

The finds assemblage from Woodend illustrates two periods of activity: the first being Mesolithic and the second Iron Age. The presence of Mesolithic activity was only revealed by the discovery of 55 pieces of chert during sample processing and was particularly associated with the hollow C10-0068. The assemblage included three blades, 17 flakes, 23 chips, and three platform cores, one a conical shaped core (CAT 30; Illus 3.9a).



Illus 3.9 (a) CAT 30 conical shaped core; (b) CAT 40 microblade. (© Headland Archaeology (UK) Ltd)

The Mesolithic dating rests on a small microlith made on a microblade, belonging to the narrow blade industry (CAT 40, Illus 3.9b), a technology that dates back as early as the 9th millennium BC in Scotland. The characteristics, raw material, and similar condition of the associated lithics imply that they are all contemporary. The readily available chert resources in south central Scotland combined with many waterways, hills, and valleys would have made this an especially attractive area for hunter-gatherers. Mesolithic sites within the wider area include quarries (Wide Hope Shank, Warren 1998; Burnetland Hill, Ward 2012), settlements (Glentaggart, Ballin & Johnson 2005; Manor Bridge, Warren 2003), several lithic scatters (Cornhill Farm, Ward 2001; Weston Farm, Ward 2006; Garvald Burn, Ballin & Barrowman 2015; Daer Valley, Ward 2010), and other isolated features (Camps Valley, see Chapter 4). Though Woodend is in an elevated position at 241m AOD, the location of Mesolithic pits in the Camps Valley at 300-426m AOD clearly shows that activity during this period was not limited to valley floors. The use of natural hollows as places to camp has been noted at other Mesolithic sites (Cormack & Coles 1964; Coles 1971; Dalland & Wickham-Jones 1998; Dingwall et al 2019), although there is no additional evidence to suggest a camp within the hollow at Woodend.

Artefactual evidence from the Iron Age activity clearly points towards blacksmithing, albeit on a small scale, possibly even a single event dated to cal AD 60–220 (95% probability; SUERC-58793). Though no in situ remains of a smithing hearth were found, this may have existed at waist height and any features associated with it have been lost to truncation. However, the quantity of hammerscale found indicates that smithing occurred in the immediate vicinity of the pit containing the remains. Ironworking of this period is known at a few contemporary sites in the area such as Hyndford Crannog (Munro 1899) and Crawford Roman Fort (Maxwell 1972).

A small cup-marked stone found in the rubble infill of the interior ditch, not far from the blacksmithing pit, is more enigmatic. It may have been deliberately collected from an area of Neolithic activity elsewhere and brought to the site. The same phenomenon is noted at other Bronze and Iron Age sites in southern Scotland and northern England (Jobey 1980; Terry 1995; Croom 2012).

3.4 Environmental Synthesis

Laura Bailey

The charcoal and pollen data from Woodend provide some evidence regarding the character of the contemporary environment between 160 BC and AD 220, the time span in the Late Iron Age to which the majority of features most likely belong. Pollen, charcoal, and plant macrofossil evidence suggest that the hillfort was situated in an area of open grassland and heath. There is no evidence for extensive woodland cover. Analysis of a pollen sample taken from a wetland area located within Camps Valley, albeit considerably higher up the Clyde catchment about 6km to the south-east (Illus 4.2; Timpany 2015), indicates that from the Late Bronze Age to the Late Iron Age part of Clydesdale was largely open grassland with herbaceous pollen such as sedge (Cyperaceae), grass (Poaceae), and other taxa commonly associated with such environments also present, for example clover (Trifolium sp.), vetch (Viccia cracca), common nettle (Urtica dioica), potentilla-type (cinquefoils), and ribwort plantain (Plantago lanceolata). Heather (Calluna vulgaris) and crowberry (Empetrum sp.) pollen were also present.

The plant macrofossil assemblage from Woodend closely mirrors the pollen assemblage from Camps Water. Open grassland and associated herbaceous taxa are reflected in the charred plant assemblage with a small number of grass seeds (*Poaceae* sp.), chickweed (*Stellaria media*), sedges, and pale persicaria (*Polygonum lapithifolium*) present in ditch fills and associated features. There was some cereal cultivation in the area, perhaps on the more fertile soils of the valley floor. This is evidenced by the presence of barley pollen and the recovery of hulled and naked barley and a small number of club / bread wheat and spelt wheat in the various fills of the enclosure ditch (Haston 2011).

Trees and shrubs were also present, although they constituted a relatively small proportion of the pollen values suggesting that they were not plentiful in the landscape. There may have been a few scattered trees and small copses but not extensive woodland cover. Birch (Betula sp.) and hazel (Corylus avellana) had the largest pollen values of the arboreal taxa. Alder (Alnus glutinosa) and oak were also represented in the pollen assemblage. Several other trees and shrubs including willow (Salix sp.), ash (Fraxinus excelsior), pine (Pinus sp.), elm (Ulmus sp.), and Sorbus sp. were also represented, though rare. The charcoal assemblage was dominated by alder but with significant amounts of hazel, maloideae (most likely Sorbus), and oak (from one feature) identified, together with smaller amounts of birch, willow, and heather. This indicates that a variety of environments including open, dryland woodland (hazel and oak), woodland edge, and scrub (maloideae) were exploited. Wetland species such as alder, birch, and willow may have grown along valley sides and perhaps in the valley bottoms of the Woodend and Wandel Burns. The identified charcoal fragments were mostly from the fills of pits and post-holes located in the enclosure. The post-holes contained a mixture of taxa from small diameter roundwood and are therefore unlikely to be the remnants of in situ posts.

The most notable charcoal assemblage was from large pit C10-0065, the fill of which also incorporated numerous fragments of burnt bone. This pit contained the largest variety of taxa on the site and the only examples of heather and oak charcoal. The dominance of oak is notable and suggests that it may have been selected for a specific purpose. Oak charcoal's ability to maintain high temperatures meant it was frequently used in the smithing process (Cressey 2011: 32) and its presence here may be further evidence of metalworking taking place in the vicinity. Evidence of metalworking of a comparative date was found at Newton Plantation further up the Clyde Valley (see Chapter 6) where a ceramic charcoal is unlikely to be from turves. Heather was not recorded in any of the other samples examined throughout the project.

3.5 Discussion

The Southern Upland boundary fault lines contain abundant beds of radiolarian chert (Ballin & Barrowman 2015: 9; Ward 2017: 10), which provided a readily available source material for the Mesolithic knappers. Many of the excavated Mesolithic lithic scatters within the area, such as the twenty sites in Daer Valley 15km to the south of Woodend (Ward 2017) and Garvald 30km to the north (Ballin & Barrowman 2015), are interpreted as single occasion events. The similarity in size and technique of the chipped stone found at Woodend would suggest that the assemblage also represents a single occupation or knapping event. Although the material is certainly not in situ, it must have washed into the hollow from relatively close by and given the fresh condition of the relatively soft chert, it is possible the hillwash event occurred shortly after the knapping took place. Whether the original knapping floor was within the excavated area and has been lost through Iron Age settlement, ploughing, and more recent agriculture, or it survives outwith the excavation is unknown. The Mesolithic sites mentioned above were discovered through fieldwalking and research projects, and it is due to an accident of preservation in a hollow that the Woodend site was discovered at all. It appears very likely that the Mesolithic hunter-gatherers used the Rivers Clyde and Tweed and their tributaries as corridors to move around the landscape (Ward 2017: 47), visiting the same areas over millennia.

Interpretations of hillforts as places purely of defence have now been overturned with notions of social status and seasonal gathering places being suggested (Murtagh 2014: 380; Lock & Ralston 2017), although it is recognised that they would likely have been used and occupied in a number of different ways. Hillforts are known to range in date from the Late Bronze Age (c 1000 BC) to the early medieval period (c AD 1000). Hillforts are not necessarily located on hills but are generally characterised by one or more encircling ditches and banks which sit on a topographic prominence.

The Scottish Borders is a popular location for Iron Age hillforts with a tenth of the total hillforts in the British Isles located in the region (Lock & Ralston 2017). The eastern half of the Borders has a fairly dense concentration of hillforts with those in southern Lanarkshire forming the western boundary of this concentration (Halliday 2019: 73). Despite this, very few hillforts have been excavated in the Lanarkshire area. The county inventory for Lanarkshire records Woodend as a miscellaneous earthwork (RCAHMS 1978, 157 no 327) identified through aerial photographs (Illus 3.10), without classifying it as either a fort or a settlement. Traditionally such earthworks were assumed to date to the Iron Age. The definition of a hillfort in the Hillfort Atlas of Britain and Ireland used three criteria, namely topographic position, scale of the enclosing works, and size of enclosed area (Lock 2019: 6). In the case of Woodend, the interior area measures 0.2ha (the minimum requirement for a hillfort), the interior ditch is over 4m wide, a scale which implies such an effort in its construction that it was beyond the function of a stock boundary and even indicates a certain pretension, and finally it occupies a slight knoll, the slopes of which enhance the strength of the artificial defences.

Although only the north-western corner of the site was exposed during the works, the excavation has expanded considerably upon the initial description based on the cropmarks. The presence of the broad interior ditch and the narrow exterior ditch was confirmed and a probable concentric palisade trench was discovered within the enclosed area. The evidence of the northern stub of the palisade trench, the material containing the burnt bone used as packing and the radiocarbon dates indicates that there is more than one sequence of events taking place within the space enclosed by the ditches.

The presence of hammerscale and ironworking slag, recovered from a small pit within the interior, indicates at least one episode of blacksmithing at the site, possibly the production or repair of metal objects. It is a useful and significant addition to the corpus of sites in the Lanarkshire area, such as



Illus 3.10 Aerial view of Woodend hillfort, excavation results superimposed. (© Headland Archaeology (UK) Ltd)

Hyndford Crannog (Munro 1899) and Crawford Roman Fort (Maxwell 1972). This evidence is helping to build a picture of craft activities taking place at this time on enclosed settlement sites across the region and enhances our understanding of technological processes undertaken from later prehistory onwards.

With the prominent natural rises, the views over the landscape, and the proximity to the natural water source of the River Clyde, the general location was clearly attractive to the builders of the forts at both Woodend and Devonshaw Hill (Canmore ID <u>47343</u>), the latter overlooking Woodend some 500m to the north-east. Devonshaw Hill remains unexcavated but is characterised by the remains of an oval enclosure measuring 37m by 30m within a single bank and external ditch. The enclosure is comparable in size and structure with the settlement at Berries Burn (Canmore ID <u>47384</u>) located *c* 5.5km to the south-east of the site. The pairing of large and small enclosures is a common factor in the Iron Age settlement landscape in south-west Scotland (Banks 2002: 33–4) and is also noted in the Cheviots (Frodsham et al 2007: 250–65). At Berries Burn and Richie Ferry (Canmore ID 47425), both of which are located 5km to the south of Woodend, a fort is located directly beside a settlement.

It is possible that Devonshaw Hill and Woodend form such a pairing although the distance between the two is somewhat greater. The significance of such observations is more difficult to gauge. The pairings may reflect the social status of the inhabitants and indicate a form of hierarchical settlement structure (Murtaugh 2014: 110) but may also be a function of different chronologies. Where they can be determined, the chronological sequences for hillforts in southern Scotland imply a peak of fortification construction in the 5th to 3rd centuries BC, exemplified by Broxmouth in East Lothian. Here the main defensive phases (phases 2 and 3), comprising the construction and modification of ditches, ramparts, and gateways to form an enclosure system, date to between 490 and 235 BC (Armit & McKenzie 2013: 18-9). If Devonshaw Hill and other more elevated forts, such as Arbory Hill (Canmore ID 47427) 4.2km south of Woodend, are assumed to be typical fortifications of this period of the Iron Age, then Woodend belongs to a later period when settlement in the Borders is typified by less defensive settlements in less prominent positions, such as Cold Chapel (Canmore ID 47380) 3.1km south-east or Snaip Hill (Canmore ID 48748) 3.9km north-east (neither of which have been dated), or Phase 6 at Broxmouth (ibid). The apparent robustness of the perimeter at Woodend suggests it may have enjoyed an elevated social position in respect of its contemporaries. In these respects, the radiocarbon date, cal AD 20-210 (95% probability; SUERC-58790), from the primary fill of the interior ditch at Woodend is of considerable interest. If the date is interpreted as representing an early phase of activity (with the caveat that this is a single date, and the context is not secure) this indicates that Woodend formed part of a later pattern of settlement, considerably later than the peak construction phase for hillforts. A tentative chronological framework for the Iron Age in south-west Scotland proposed by Murtagh (2014: 238-9) suggests that the small bounded communities of the Early Iron Age became part of larger networks within a more hierarchical society presided over by large enclosed sites in the Late Iron Age. There is certainly nothing in the evidence recovered from Woodend to contradict this, and if the elevated status of Woodend argued above is correct then this change to a more hierarchical society probably predates the arrival of the Romans.

The radiocarbon dates suggest that Woodend was occupied during the Roman presence in the region. Wandel Roman Fort and Camp are situated 1.5km to the south-west of Woodend and probably relate to the initial invasion phase of Roman activity in the second half of the 1st century AD, with the construction of the Border-Crawford-Inveresk Roman Road following later (Jones 2011: 315). Hypotheses about the nature of the contact between the Romans and the local Iron Age population in southern Scotland vary from essentially friendly (Armit & McKenzie 2013: 511) with agreements made with and adhered to by the local Iron Age population (Breeze 1982: 56; Mercer 2018: 203), to violent sieges such as Burnswark Hill (Canmore ID 72883, 72885) less than seventy years after initial contact (Reid & Nicholson 2019: 476). To the Romans the territory of Upper Clydesdale was an area to be transited, via supply lines linking the forts, and subject to policing and scouting activities (Jones 2011: 121).

The Roman road is well preserved in several places in Lanarkshire but has been largely erased in the section north of Wandel. Its presence at the foot of the slope at Woodend is probably confirmed by the cropmarks of a row of large pits east of the A702 road (under which the Roman road may lie) recorded on a low level oblique RCAHMS aerial photograph of this area taken in July 2006 (Illus 3.11). It is likely that the pit uncovered in the excavations at Woodend belongs to this group although there was no evidence to confirm its date. Typically, the stone required to construct the Roman roads came from roadside quarry-pits, which have been identified at six locations from the Borders



Illus 3.11 Oblique aerial view of possible Roman quarry pits. (© RCAHMS)

northwards via Crawford to Inveresk (Canmore IDs 68365, 71714, 149390, 149446, 149599). The pits at one site near Pillar Knowe (Canmore ID 50146), 15km south-west of Edinburgh in the Pentland hills, are described as measuring 5–6m in diameter and 0.25m deep, so at 1.5–2m in diameter the Woodend example is on the small side. The stone banks of the hillforts may have provided an additional source of material for Roman road construction although there is no direct evidence of this.

The excavation at Woodend, although limited, did confirm the presence of the hillfort which prior to excavation was only known through cropmark evidence, and although only c 5% of the interior was investigated, at least one structure was identified and some understanding of types of activity was achieved. Many potential comparators in the vicinity of Woodend are known only through identification of cropmarks and many of the answers to questions regarding complexity and dating can only be found by excavation (ScARF 2012c: sect 6.4) which to date has not taken place. Their location within upland landscapes, where very limited development takes place, makes opportunities to excavate such sites very rare, and even comparatively small interventions such as this are of great value.

4.1 Introduction

An area measuring nearly 10.6 ha was investigated across Camps Valley in relation to the construction of access tracks (Illus 4.1) and installation of electrical cables. Due to the routes of the cables and access track, the archaeologically monitored areas comprised a series of roughly parallel linear strips which ran from close to the top of the ridge on the southern side of Camps Valley (an area known as Mossy Dod), down across the valley floor and then up the slope over a high knoll (Crannies Hill) on the northern side (Illus 4.2). The ground investigated ranged in height between c 270m AOD on the valley floor and 450m AOD on the slopes of the summits.

Camps Water runs through the valley from east to west, joining the Clyde some 3km downstream. The land around the cable routes and access tracks is currently used as rough pasture for grazing. A total of 48 individual features were identified during the works, forming six foci of activity and fourteen isolated features. Illus 4.2 shows the location of the features, labelled either individually or by letter (Location A, B, C and so on) where there are groups; more detailed plans of the features in groups or individually are located throughout the chapter. The letter locations do not necessarily indicate contemporaneity of all features at that location. Camps Valley was also the location of the environmental pollen core sample described in Section 2.5.2. The majority of features were small shallow pits with limited evidence for structural remains. However, some evidence points to the presence of possible temporary structures. The features range in date from the Mesolithic through to the Late Iron Age.

It was not possible to establish the original depth of the pits as the extent to which they had been truncated and by what was difficult to determine. Truncation by cultivation such as ploughing or turf stripping or by pedogenesis were all possibilities,



Illus 4.1 View west of topsoil stripping for access road on the southern side of Camps Valley. (© Headland Archaeology (UK) Ltd)



Illus 4.2 Plan of features in Camps Valley. (© Headland Archaeology (UK) Ltd)

but whether identification of these processes could be satisfactorily achieved within the limitations of the project is unknown. The circumstances of their discovery were a factor; identified as negative features in the geological subsoil when the turf/ topsoil/peat was stripped away by machine, any potential evidence for the actions that reduced their original depth would have been removed.

The excavation established that the valley slopes in this location were not barren, featureless, and empty as might be assumed from current views; they had in fact been subject to fairly intense activity throughout the prehistoric period.

4.1.1 Radiocarbon Dates and Dating

The majority of features were pits and were dated by the radiocarbon dating of material and the spot dating of artefacts recovered from the fills. Of a total of 48 features, 21 were dated through radiocarbon determinations (Table 4.1). The dates in Table 4.1 show two significant gaps - one between 5900 BC and 3800 BC and the other between 3000 BC and 2500 BC, which may suggest a lack of dated activity in those periods. Evidence for the processes by which the fills of the pits were formed was not clearly discernible. On the one hand nearly all the environmental material was taken from charcoalrich deposits or concentrations of charcoal which imply a deliberate or single event deposition, rather than from a well sorted and mixed deposit which would be indicative of natural erosion. On this basis the contextual security of the material is good enough to give an accurate indication of the date the pits were in use. Most of the pottery fragments,

Lab Code	Context No	Material	Radiocarbon Age вр	Radiocarbon Date (95% probability)
SUERC-58798	13-0002	Charcoal: Corylus avellana	7946±29	7030–6695 cal вс
SUERC-58794	14-S004	Charcoal: Corylus avellana	7925±31	7030–6680 cal вс
SUERC-58812	11-0028	Charcoal: Corylus avellana	7115±30	6055–5920 cal вс
SUERC-58809	14-E011	Charcoal: Corylus avellana	4957±29	3790–3660 cal вс
SUERC-58814	13-0016	Charcoal: Corylus avellana	4959±27	3790–3660 cal вс
SUERC-70744	02022	Charred Nutshell: Corylus avellana	4901±30	3765–3635 cal вс
SUERC-70748	02024	Charred Nutshell: Corylus avellana	4861±30	3705–3535 cal вс
SUERC-58813	11-0043	Charcoal: Corylus avellana	4823±28	3660–3530 cal вс
SUERC-58811	11-0025	Charcoal: Corylus avellana	4832±28	3695–3530 cal вс
SUERC-58808	13-0013	Nutshell: Corylus avellana	4698±30	3630–3370 cal вс
SUERC-58801	13-0004	Nutshell: Corylus avellana	4726±28	3635–3375 cal вс
SUERC-58804	13-0015	Charcoal: <i>Pomoideae</i> sp	4662±29	3520–3365 cal вс
SUERC-70762	03004	Charcoal: Non-oak	4463±30	3360–3025 cal вс
SUERC-70751	02009	Charcoal: Non-oak	4499±30	3350–3100 cal вс
SUERC-58800	14-S019	Nutshell: Corylus avellana	4470±30	3340–3025 cal вс
SUERC-58799	11-0004	Charcoal: Corylus avellana	3985±30	2575–2460 cal вс
SUERC-58803	11-0010	Charcoal: Corylus avellana	3972±30	2575–2350 cal вс
SUERC-58810	11-0023	Charcoal: Corylus avellana	3906±30	2470–2300 cal вс
SUERC-70752	02018	Charcoal: Non-oak	3897±30	2470–2300 cal вс
SUERC-70761	02013	Charcoal: Non-oak	3873±30	2465–2215 cal вс
SUERC-58802	14-S024	Charcoal: Alnus glutinosa	1903±27	cal ad 25–210

Table 4.1 Radiocarbon determinations from Camps Valley

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however, showed signs of abrasion implying the fragments were subject to frictional processes prior to their deposition in the pits. This abrasion is not indicative of primary or structured deposition, but the possibility that the abrasion of the fragments could have resulted from their curation cannot be discounted. In two cases there was a gap between the dates established for material recovered from the fills. This highlights the issues with dating material from shallow features and this is discussed in more detail below.

4.1.2 Background

The landscape of Camps Valley contains many sites of cultural heritage interest (Illus 4.3), mostly identified through survey, dating from the Neolithic to the 20th century and ranging from ritual monuments and find spots to settlements and agricultural earthworks. The ritual monuments include the earliest dated feature which is Normangill Henge (Canmore ID <u>47386</u>), located on the floor of the valley and one of the best upstanding monuments of this type in Scotland. Its morphology suggests it belongs to the 'classic' tradition of henge building (Harding 2003: 12) and it is likely to have been constructed after 3000 BC. It is unexcavated (although it was disturbed by the construction of a 20th century railway track later replaced by a road - through its centre). In addition, three prehistoric burial cairns (Canmore IDs 47388, 47385 and 47395) are noted on the southern ridge, on Mossy Dod, Normangill Rig, and Fall Hill, at least two of which have been disturbed by stone robbing. The Normangill Rig cairn was robbed in the 19th century to provide building material for a wall and revealed 'the bones of a man of large stature' (OS Name Book Vol 18: 127). Two small enclosed Bronze Age cremation cemeteries are recorded, one at the mouth of Camps Valley on Fall Hill (Canmore ID 47394), the other at the head (Canmore ID 74516). Two more cairns are recorded (Canmore IDs 47406 and 124494) although their dates and functions have not been



Illus 4.3 Plan of known heritage assets in and around Camps Valley. ($^{\odot}$ Headland Archaeology (UK) Ltd)

established, and two burnt mounds (Canmore IDs 79551 & 74516) are recorded on the southern slopes of the valley.

On the settlement front, eight unenclosed platform settlements were identified on the lower hillslopes either side of the valley; Rome Hill (Canmore ID 89272), Reed Gill (Canmore ID <u>47400</u>), Earns Gill (Canmore ID <u>74688</u>), Campshead/Reeve Hill (Canmore ID 70829), Midge Hill (Canmore ID 48581), Peat Rig (Canmore ID 48582), Campshead/Fairburn Rig (Canmore ID 78103), and Grains (Canmore ID 48583). These consisted of between two and five house platforms in each case with the exception of the 13 platforms at Grains. A cairnfield (Canmore ID 78105) was noted close to Reeve Hill UPS possibly indicating some clearance for agriculture. Two further UPS were recorded at the mouth of the Camps Valley - Campside Wood (Canmore ID 47398) and Camps Water (Canmore ID 79557). On a knoll at the head of the valley a hillfort, Camps Knowe Wood (Canmore ID 48578), was located, which is probably Iron Age in date, as is the hillfort at Berries Burn not far from the mouth of the valley.

The Border-Crawford-Inveresk Roman Road (Canmore ID <u>368885</u>) cuts across the mouths of both Midlock and Camps Valleys and not far from its route Crawford Roman Fort (Canmore ID 47396) was constructed, located 300m from the junction of the River Clyde and Camps Water. Crawford Castle (also known as Tower Lindsay – Canmore ID 47407) is located some 100m to the south-east of the fort.

Post medieval remains in the form of rig and furrow and a series of earth banks and enclosures (Canmore IDs <u>89213</u>, <u>89223</u>, <u>89224</u>) were identified on the valley floor during archaeological surveys for a sewage plant. The upstanding remains of enclosures and a structure were recorded along the edge of the river escarpment between 100m and 500m west of the henge during survey works for the Clyde Wind Farm EIA.

4.2 Archaeological Results

The excavated features identified during the topsoil strip are presented below in period order.

4.2.1 Mesolithic

Three pits of Mesolithic date were recorded within the valley at elevations between 300m and 425m AOD: two on the southern side of the valley (C13-0001 and at Location B C11-0027 – its specific location is shown in Illus 4.12) and one on the northern side (C14-S006) which was at the



Illus 4.4 (a) Plan of pit C13-0001; (b) North-west facing section of pit C13-0001; (c) Plan of pit C14-S006; (d) East facing section of pit C14-S006. (© Headland Archaeology (UK) Ltd)
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Illus 4.5 North-west facing section of pit C11-0027. (© Headland Archaeology (UK) Ltd)



Illus 4.6 View of pit C14-S006 during excavation. (© Headland Archaeology (UK) Ltd)

far north-east of the monitored area (see Illus 4.2). All three were of a similar size and shape, roughly circular in plan, shallow in nature but with relatively steep sides, and with diameters of between 1.1m and 1.4m (Illus 4.4a-d, Illus 4.5). Pit C13-0001 contained a single fill with a mix of hazel and maloideae charcoal, with the majority being hazel; a fragment of the hazel provided a radiocarbon date of 7030–6695 cal BC (95% probability; SUERC-58798). Pit C14-S006 showed more complex deposition with three fills, the middle of which contained a similar mix of hazel and maloideae charcoal. A fragment of the hazel charcoal provided a similar radiocarbon date of 7030-6680 cal BC (95% probability; SUERC-58794). In general, its fills contained more stones than the others and it may have functioned as a hearth, although there was no sign of in situ burning. It was 100m higher up the side of the valley than the other pits, close to the summit of Crannies Hill (Illus 4.6). Although pits C14-S006 and C13-0001 were similar in date and contained similar fills they were separated by over 2km of distance, nearly 100m of elevation and were on opposite sides of the valley. The single fill of pit C11-0027 contained almost exclusively birch charcoal with a very small amount of hazel; a fragment of the latter provided a radiocarbon date of 6055-5920 cal BC (95% probability; SUERC-58812), close to a millennium later than the others.

4.2.2 Early to Middle Neolithic

Seven pits of Early Neolithic date were identified: a group of four pits on the northern side of the valley (Illus 4.2, Location D) and three individual pits on the southern side of the valley (C13-0017 in Location C and C02021 and C02023). The group of pits on the northern slopes comprised one large pit, C14-E010, measuring 1.9m by 1.1m, and three smaller pits, C14-E008, C14-E006, and C14-E012, 2m to the south-east, all around 282m AOD (Illus 4.7). The fills of all three smaller pits were similar. All contained a significantly larger proportion of hazel in comparison to other burnt material, and pit C14-E008 contained small amounts of oak charcoal as well, one of only two examples of oak from any of the features found in Camps Valley. Pit C14-E010 also contained significant fragments of Carinated Bowl ware (V11) and flint debitage. The group can be dated to the Early Neolithic (95% probability; SUERC-58809: 3790-3660 cal BC) from hazel charcoal found within the large pit, in association with the pottery, and the three smaller pits are thought to be contemporary due to their proximity and similarity of fills.

A pit, C13-0017, was located on the southern side of the valley, (Illus 4.8; its specific location is also shown on Illus 4.13). It was very shallow, surviving to less than 0.1m and the sides of the feature were barely perceptible. The fill of the pit contained charcoal and heat-affected stone, and there appeared to be evidence of in situ burning. The majority of the



Illus 4.7 (a) Plan of pits C14-E010, C14-E008, C14-E006, and C14-E012, Location D; (b) South-east facing section of pits C14-E008, C14-E006, and C14-E012. (© Headland Archaeology (UK) Ltd)



Illus 4.8 (a) Plan of pit C13-0017; (b) South-west facing section of pit C13-0017. (\Circ{C} Headland Archaeology (UK) Ltd)



Illus 4.9 View of pit C02023 during excavation. (\Cite{C} Headland Archaeology (UK) Ltd)



Illus 4.10 (a) Plan of pit C02021; (b) North-east facing section of pit C02021; (c) Plan of pit C02023; (d) West facing section of pit C02023. (© Headland Archaeology (UK) Ltd)



Illus 4.11 (a) Plan of pit C02009; (b) South-east facing section of pit C02009. (© Headland Archaeology (UK) Ltd)

charcoal was hazel, and a fragment of that charcoal produced a radiocarbon date of 3790–3660 cal BC (95% probability; SUERC-58814). The pit lay at a similar elevation to and was contemporary with the group of pits on the northern side of the river.

Further up slope on the southern side of the valley, the remaining two pits, C02021 and C02023, were located around 35m apart (Illus 4.2). Both pits measured around 1m in diameter and 0.2m in depth and were located at a height of about 320m AOD (Illus 4.9). They were filled with similar deposits (C02022 and C02024 respectively) which were charcoal-rich dark grey-brown sandy silts (Illus 4.10). Both deposits contained Carinated Bowl pottery sherds and a small amount of lithic material. Charred nutshell retrieved from the fills dated to between 3760 and 3535 cal BC (95% probability; SUERC-70744 and 95% probability; SUERC-70748 respectively). The presence of fragments of Beaker pottery recovered from pit C02023 is thought to be the result of later intrusion, since the typological date for the Carinated Bowl pottery sherds matches the date for the charred nutshell, although the nature of that intrusion was not clear.



Illus 4.12 (a) Plan of features at Location B; (b) North-west facing section of pit C11-0024; (c) North-west facing section of post-hole C11-0038; (d) North-east facing section of post-holes C11-0036, C11-0032 and pit C11-0043. (© Headland Archaeology (UK) Ltd)

Eleven features dating to the Middle Neolithic period were present, spread across both sides of the valley. The highest feature dating to this period was a spread of charcoal-rich material, C02009, at around the 380m AOD contour on the southern side of the valley (Illus 4.2). It measured 1.2m by 0.7m and was only 0.03m deep (Illus 4.11). A fragment of non-oak charcoal from the fill produced a date of 3350–3100 cal BC (95% probability; SUERC-70751) which is likely to be secure material for dating despite the shallow nature of the deposit.

Pit C11-0024 lay around the 300m contour on



Illus 4.13 (a) Plan of features at Location C; (b) South-east facing section of pit C13-0008; (c) Southeast facing section of pit C13-0003; (d) North-west facing section of pit C13-0010. (© Headland Archaeology (UK) Ltd)

the lower slopes of the southern side of the valley, at Location B (Illus 4.2). It was around 1.7m in diameter, 0.1m deep (Illus 4.12a, 4.12b), and had two fills, the upper of which was a charcoal-rich sandy silt and clay. The charcoal was entirely made up of hazel, which was dated to 3695–3530 cal BC (95% probability; SUERC-58811). No artefacts were found within the feature.

It should be noted that a similar radiocarbon date (3660–3530 cal BC; 95% probability; SUERC-58813) was obtained from a fragment of hazel charcoal in pit C11-0043 which lay 7m to the south-east. However, artefacts recovered from the fill suggest this feature belonged to a later date (Late Neolithic) and the fragment of charcoal from which the date was obtained was a later incorporation. It is not impossible that the charcoal in pit C11-0043 originated from pit C11-0024 or activities immediately related to it.

A group of four features was located at the 280m contour on the southern side of the valley (Illus 4.2, Location C), in a slight hollow set back into the slope of the hill. They measured between 1.5m by 0.9m and 0.4m by 0.3m (Illus 4.13) and all had been heavily truncated (Illus 4.13b-d), with the best-preserved example being less than 0.2m deep. Two pits, C13-0003 and C13-0008, had evidence of burning within their base and contained greyishbrown sandy silt fills in contrast to the darker clayey fills of the other two features (Illus 4.14). In general, hazel was the most common charcoal present in the fills, although one pit, C13-0010, contained a very high proportion of maloideae, and another pit C13-0008 contained a broadly equal proportion of hazel and alder, with a small amount of maloideae present. Small amounts of lithic debitage were also present in some of the pits. A fragment of nutshell from one of the pits in the group (C13-0003) provided a date of 3635-3375 cal BC, (95% probability; SUERC-58801) placing it in the Middle Neolithic. A small shallow pit C13-0005 was located 10m south of this group of features; no environmental or dating evidence was recovered from it but it may be contemporary.

Another pit of contemporary date lay 45m to the north-east (Illus 4.2). This pit, C13-0012 (Illus 4.15), was around 0.8m in diameter and 0.1m deep and contained large amounts of heat-affected stone. The charcoal from the pit was a mix of mostly hazel, some alder and a small amount of blackthorn – the only occurrence of blackthorn on this site. A fragment of hazel charcoal from the fill was dated to 3630–3370 cal BC (95% probability; SUERC-58808). Two sherds of modified Carinated Bowl pottery were also retrieved from the fill, which fit with the radiocarbon date, along with a small assemblage of lithics that point to the earlier part of this period.

Still on the southern side of the river, but nearly a kilometre to the east of pit C13-0012, pit C13-0014 was found at an altitude of 330m AOD (Illus 4.2). It was 0.5m in diameter and contained a charcoal-rich fill and fire-cracked stones (Illus 4.16), although there was no evidence of in-situ burning present (Illus 4.17). The pit was dated to 3520–3365 cal BC



Illus 4.14 View south of features at Location C prior to excavation. (© Headland Archaeology (UK) Ltd)



Illus 4.15 (a) Plan of pit C13-0012; (b) Southwest facing section of pit C13-0012. (© Headland Archaeology (UK) Ltd)



Illus 4.16 (a) Plan of pit C13-0014; (b) Southeast facing section of pit C13-0014. (\Cities Headland Archaeology (UK) Ltd)



Illus 4.17 View north-west of section through pit C13-0014. (© Headland Archaeology (UK) Ltd)



Illus 4.18 (a) Plan of pits C14-S018 and C14-S020 at Location E; (b) South facing section of pit C14-S020; (c) North-west facing section of pit C14-S018. (© Headland Archaeology (UK) Ltd)



Illus 4.19 View south-east of pit C14-S018. (© Headland Archaeology (UK) Ltd)



Illus 4.20 (a) Plan of pit C03003; (b) Southeast facing section of pit C03003. (© Headland Archaeology (UK) Ltd)

(95% probability; SUERC-58804) by a fragment of pomoideae charcoal.

On the northern side of Camps Valley at Location E, two adjacent pits, C14-S018 and C14-S020 (Illus 4.2, Location E, Illus 4.18), could also be dated to the Middle Neolithic, although a few centuries after the features described above. The larger pit C14-S020 was around 1m in diameter and was one of the best-preserved features excavated in Camps Valley, surviving to a depth of 0.3m. It contained a single sherd of Impressed Ware. The smaller pit C14-S018 was around 0.7m in diameter and contained larger quantities of Impressed Ware pottery fragments (V9; Illus 4.19). Both contained small amounts of lithic debitage. Charcoal from the pits was largely hazel, with a small amount of alder, oak, and maloideae also present. Charred hazelnut shells were also found within both features and nutshell from the smaller pit was dated to 3340–3025 cal BC (95% probability; SUERC-58800).

Some distance to the north-east of these pits, a single isolated pit, C03003, was recorded at a height of 390m AOD (Illus 4.2)– the highest Neolithic pit on the site (only one other pit – from the Mesolithic – was higher). The pit was 1.2m in diameter with steeply sloping sides and a flat base (Illus 4.20). The primary fill, C03004, was a mid-brown silty loam located in the north-eastern half of the feature and contained charcoal that dated to 3360–3025 cal BC (95% probability; SUERC-70762). Overlapping the primary fill and located on the south-west (downslope) side of the pit were deposits C03005 and C03006, darker grey silty loams thought to be residues from burning.

4.2.3 Late Neolithic / Chalcolithic

Features and deposits spanning the Late Neolithic and Chalcolithic periods were identified at five locations, solely on the southern side of the valley, and included two temporary structures. At Location A (Illus 4.2) on a flattish section of the slopes of Mossy Dod there was a group of three pits and a further group of two pits and a gully a short distance away. These were all concentrated around the 380m contour.

Three pits, C11-0003, C11-0005, and C11-0014, all lay within a metre of each other (Illus 4.21). Two of the pits, C11-0005 and C11-0014, were steep sided and appeared to have been truncated, though by what was unclear. One pit, C11-0003 (Illus 4.22a), was much shallower with gently sloping sides, and contained 40% of a complete pot of Grooved Ware / Impressed Ware type (V4). Another smaller pit, C11-0005 (Illus 4.22b), contained fragments of the same vessel, suggesting that while these features may not have been dug at the same time, they were certainly backfilled contemporaneously and were intrinsically linked in some way. Pit C11-0003 also



Illus 4.21 Plan of features at Location A. (© Headland Archaeology (UK) Ltd)

contained an arrowhead from a much earlier period (Early to Middle Neolithic) and two potentially contemporary scrapers (Middle to Late Neolithic). Of these two pits, the smaller, C11-0005, contained a large proportion of birch charcoal, while the larger contained more hazel. The third pit, C11-0014, was heavily truncated but showed evidence of in situ burning in the form of heat-affected natural subsoil across part of the feature. The feature had been so heavily truncated that no charcoal or charred material of any sort was recovered from the fill of the pit, despite indications of in situ burning. Hazel charcoal from the fill of pit C11-0003 was dated to 2575-2460 cal BC (95% probability; SUERC-58799) and it is thought that all three features date to the same period.

Just over 10m to the south-east on the same contour, a large black spread of material was identified (Illus 4.23) but was revealed after excavation to be three features – a large pit, a smaller intercutting pit, and a gully (Illus 4.21). The large pit, C11-0009 (Illus 4.22c), was shallow and its fill contained charcoal and fire-cracked stone. On its western side, it was cut by the small sub-circular pit C11-0011. Both pits had considerable amounts of charcoal within their fills, suggesting either in situ burning or deliberately dumped material. Bordering the pits was a narrow, curved gully C11-0017 (Illus 4.22d). It followed the line of the pit and was steep sided, which suggests it contained uprights of some description that functioned as a windbreak, protecting the features to the north (although some protection from a southerly wind would have been afforded by the hill), and leaving the group open overlooking the valley. This group of features was dated to 2575-2350 cal BC (95% probability; SUERC-58803) by a fragment of hazel charcoal from the fill of the large pit C11-0009, broadly contemporary with the group immediately to the north-west.

The presence of fragments of one pot in two different pits and an arrowhead from a different time period highlights the issue of interpreting such shallow features where the formation process is undetermined by lack of evidence. If the arrowhead was deliberately deposited in the pit at the same time as the pottery fragments it was a 'historical' artefact to those depositing it and suggests the



Illus 4.22 (a) South-east facing section of pit C11-0003; (b) South-east facing section of pit C11-0005; (c) South and south-west facing section through pits C11-0011 and C11-0009; (d) North-east facing section of pit C11-0017. (© Headland Archaeology (UK) Ltd)



Illus 4.23 View south-east of spread of black material prior to excavation. (© Headland Archaeology (UK) Ltd)

location was a focus for ceremonial activity. The evidence of the gully indicates a change in activity from simply digging pits to the erection of structures (whether permanent or temporary) and may reflect a general change in the activities taking place in the valley.

Three further pits on the southern side of the valley, C02012, C02017, and C11-0022 (Illus 4.2), were identified and dated to the Chalcolithic. A small pit, C02012 (Illus 4.24), lying 40m north-west of Location A measured 0.5m in diameter and 0.15m deep and contained a concentration of angular stones, C02014 (not illustrated), which may be indicative of post packing. The upper fill of grey clay silt contained small sherds of Beaker pottery, and non-oak charcoal retrieved from the pit dated



Illus 4.24 (a) Plan of pit C02012; (b) Northeast facing section of pit C02012. (© Headland Archaeology (UK) Ltd)



Illus 4.25 (a) Plan of pit C02017; (b) Northwest facing section of pit C02017. (© Headland Archaeology (UK) Ltd)

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Illus 4.26 North-west facing section of pit C11-0022. (© Headland Archaeology (UK) Ltd)



Illus 4.27 View south-west of pit C11-0043. (© Headland Archaeology (UK) Ltd)

to 2465–2215 cal BC (95% probability; SUERC-70761); this is in keeping with the Beaker date. It is slightly later than the dates for the features in Location A although the date range is overlapping and is broadly speaking part of the same character of activity.

About 250m west of pit C02012 a further small pit, C02017, was recorded at 367m AOD. It was oval in plan and measured 0.4m diameter and 0.22m deep. The pit contained three fills (Illus 4.25); the basal fill, C02018, was charcoal-rich and a fragment of this non-oak charcoal was dated to 2470–2300 cal BC (95% probability; SUERC-70752).

Pit C11-0022, located 450m west of C02017, was subcircular in plan measuring 0.7m in diameter and had been badly disturbed by animal burrowing

(Illus 4.26). The fill, C11-0023, was entirely made up of hazel charcoal. A fragment of this charcoal was dated to 2470–2300 cal BC (95% probability; SUERC-58810).

At around 300m AOD (Illus 4.2, Location B), a pit, C11-0043, and six post-holes, C11-0030, C11-0038, C11-0040, C11-0034, C11-0032, and C11-0036 (Illus 4.12), provide further tantalising evidence for a structure. The features were poorly preserved with one post-hole, C11-0038, having significantly disturbed edges and similar appearance to a pit in profile (Illus 4.12d). The oval pit, C11-0043, was nearly 3m long and was slightly cut into the slope of the hill, potentially to form a flat surface (Illus 4.27). Its primary fill, C11-0042, was a charcoal-rich sandy silt (Illus 4.12d); a fragment of hazel charcoal from this fill was dated to 3660–3530 cal BC (95% probability; SUERC-58813). The deposit also contained pottery sherds of Late Neolithic Grooved Ware (V6 and V7) which dated to nearly a millennium later; even more of the same material was found in the deposit above. The features were located in a slight naturally occurring hollow which may have afforded protection to the activities taking place in the location.

The evidence here is as confusing as the evidence for the features at Location A. The charcoal rich sediment may relate either to activities within the pit (and therefore the radiocarbon date likely reflects the date of the pit and those activities) or activities outwith the pit, in which case the sediment entered the pit through natural processes. The pottery sherds would be later intrusions in the first case and either later intrusions or contemporary with the pit in the latter. The presence of potential post-holes, although not necessarily clearly structural in function, appears to represent something different in character to the evidence of earlier activities.

4.2.4 Iron Age Activity

A single pit, C14-S023, found close to Location D on the northern side of the valley (Illus 4.2) was radiocarbon dated to the Late Iron Age (cal AD 25–210, 95% probability; SUERC-58802). The pit was small, with a 0.4m diameter and a 0.04m depth (Illus 4.28). Despite the shallow nature of the pit, the fill contained abundant alder



Illus 4.28 South-east facing section of pit C14-S023. (© Headland Archaeology (UK) Ltd)



Illus 4.29 Plan of features at Location F. (© Headland Archaeology (UK) Ltd)

charcoal. This pit is something of an anomaly in comparison to the other recorded features as there are no known Iron Age sites nearby, and without the radiocarbon date the pit could easily have been classified as Neolithic by comparison with the other features.

4.2.5 Undated Features

In addition to the pits which can be assigned to specific periods through radiocarbon dating, artefactual evidence or by association, there are seven features which cannot be confidently ascribed to any specific period. However, these undated features contain evidence of activity that may relate to the features discussed above and can still contribute to an appreciation of how densely (or otherwise) the valley was occupied.

Two isolated pits contained limited material suitable for radiocarbon dating and therefore remain undated. Both are on the southern side of the valley on the western extent of Mossy Dod. Pit C11-0019 lay at around 378m AOD (Illus 4.2), was under a metre in diameter and was filled with a deposit similar to those seen in the pits at a similar altitude 250m to the east, although containing considerably less charcoal. It may be that, like those pits, it is Late Neolithic/Chalcolithic in date, however, this is conjecture. Feature C11-0021, 200m to the west, comprised a patch of natural subsoil which had been subject to intense heat at some stage, becoming bright pink, bright orange, and dark purple in



Illus 4.30 View north-west of ditch C15-0011. (© Headland Archaeology (UK) Ltd)

colour. A very small number of charcoal fragments were present on the top of the burnt natural. The feature is presumed to be the base of a hearth which has been almost entirely truncated and could be of any date.

Three parallel ditches running north-west to south-east and two shallow oval pits were located on the valley floor (Illus 4.2 – Location F). Two of the ditches were around 2.5m wide (Illus 4.29); the northern one, C15-0004, had a U-shaped profile and the southern one, C15-0011, had two 'channels' along its base creating a double U-shaped profile (Illus 4.30). The upper fill, C15-0001, of ditch C15-0004 (Illus 4.31a) contained several flakes of chert and while these are undiagnostic, they are



Illus 4.31 (a) South-east facing section of ditch C15-0004; (b) North-east facing section of pit C15-0014. (© Headland Archaeology (UK) Ltd)

broadly prehistoric in date. However, their presence in the fill is likely to have resulted from the washing in of material from surrounding deposits and therefore they cannot be used to date the feature. Between the two wide ditches was ditch C15-0006, which measured 0.8m wide and 0.12m in depth – it is likely that a second ditch, C03011, in a second stripped area directly east is a continuation of the feature.

The features lie directly to the west of Normangill Henge, and to the east of a series of banks and enclosures on an escarpment south of the river, which are interpreted as the remains of a post medieval farmstead. The ditches are on the same alignment as the rig identifiable on LiDAR (National Library of Scotland 2022) immediately adjacent to the henge. While their exact function cannot be determined they are most likely to be associated with the farmstead rather than the henge.

Location F also included two shallow oval pits, C15-0014 and C03009, lying 13m south of the southeastern ditch C15-0011. Pit C15-0014 (Illus 4.31b) contained a very small amount of magnetic residue. However, it is such a small amount it may be natural in origin, if it had not been incorporated into the feature from elsewhere.

4.3 Finds Synthesis

Julie Franklin

The archaeology from Camps Valley was in the form of isolated pits and small pit clusters along a linear route and the finds assemblage thus is characterised by small scattered assemblages that do not form a coherent picture of prehistoric activity at any particular location. These sub-assemblages are typically too small for reliable statistical analysis, but they provide evidence for the dating and, to some extent, the nature of activity in these locations. Most of the pottery could be dated on typological



Illus 4.32 Fragment of Middle Neolithic pot. (© Headland Archaeology (UK) Ltd)

grounds such as a fragment of Middle Neolithic pot (Illus 4.32), or fragments of Impressed Ware (Illus 4.33) and Grooved Ware (Illus 4.34), but most of the lithics could be dated only by association with pottery or radiocarbon dated material.

The abraded sherds of pottery and lithic knapping debris might be considered characteristic of refuse relating to everyday activities from the mid-4th millennium BC to the late 3rd millennium BC. The remains are not extensive enough to ascertain the degree of continuity between these phases. Pits are often the only evidence of occupation from the Mesolithic to the Early Bronze Age periods with little in the way of archaeologically visible structural remains, although some features here show hints of structural elements. Beaker pottery found in Midlock Valley (see Chapter 5) was associated with the possible beginnings of the platform settlement which might imply a shift in settlement patterns at this time. There are no such indications in this section of Camps Valley.

A different type of deposition might be represented at Location A on the southern side of the valley. Grooved Ware vessel V4 (Illus 4.35) was represented by large, fresh-edged sherds of a thick, coarse pot, encrusted with thick organic residue and spread between two pits. This pottery vessel was associated with a date of 2575–2460 cal BC (95% probability; SUERC-58799) from pit C11-0003, which fits with Grooved Ware use but was also found with an Early to Middle Neolithic leaf-shaped arrowhead (Illus 4.36a) and two Middle to Late Neolithic scrapers (Illus 4.36 b–c). If these were deposited at the same time, then the arrowhead would have been a curated find, at least several centuries old at the time, and the deposition may have been deliberate - a ritual act. The location also has a much higher lithic tool to debitage ratio compared to the other lithic finds in Camps Valley. Unusual deposits of large parts of Grooved Ware vessels associated with nondomestic activity are a well-recognised phenomenon (Cowie & MacSween 1999: 53; Lochrie 2008). The assemblage may represent the aftermath of a one-off event or ceremony.

As well as changes in pottery styles, change in lithic technology and raw material sourcing might be visible, though statistics taken from such small assemblages should be viewed with a degree of caution. There seems to have been an increase in



Illus 4.33 Fragments of Impressed Ware. (© Headland Archaeology (UK) Ltd)





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hard hammer percussion in the later Neolithic. This period also seems to mark the height of flint use. Flint in Scotland is not widely naturally occurring and is found either on beaches (the nearest source of beach flint to Camps Valley is 60km away on the Clyde coast) or in flint gravels such as the deposit near Buchan, Aberdeenshire (Wickham-Jones & Collins 1977), and its occurrence indicates importation of raw material during the Neolithic (Saville 1994). Flint was associated with activity during all the periods represented in Camps Valley.



Illus 4.35 Grooved Ware vessel V4. (© Headland Archaeology (UK) Ltd)

At the Late Neolithic site at Location A, flint was found exclusively suggesting that by this time it was readily available and chert was shunned in its favour.

4.4 Environmental Synthesis

Angela Walker & Laura Bailey

Charcoal from features dating from the Mesolithic through to the Late Iron Age was identified. In the absence of dated pollen evidence prior to the Late Bronze Age, the charcoal from Mesolithic features provides a valuable insight into woodland resources present in the Camps Valley during the Mesolithic period. Apart from charcoal and hazelnut shell, few other plant remains were found from any of the periods.

Birch, hazel, and maloideae charcoal were identified in three Mesolithic pits, C13-0001, C14-S006, and C11-0027. Birch and hazel were two of the early colonisers in Scotland. Birch colonised everywhere by 11,000 years ago and hazel approximately 800 years later (Tipping 2003: 20). It is likely that birch grew on the valley floor and valley sides and hazel would have been confined to the valley sides. The maloideae charcoal was of *Sorbus* type, probably rowan (*Sorbus acuparia*). Rowan seedlings are hardy and grow fairly vigorously giving



Illus 4.36 (a) Early-Middle Neolithic arrowhead; (b) Middle-Late Neolithic scraper; (c) Middle-Late Neolithic scraper. (© Headland Archaeology (UK) Ltd)

the tree some pioneering qualities (Stuijts 2005). Rowan is very common in open woodlands and scrub, by mountain streams and in valleys. It is a light demanding species and prefers moist light soils. It is likely that the rowan grew in scattered stands and small copses rather than extensive woodland stands (Tipping 2003: 24).

Palynological evidence gathered elsewhere suggests that birch-hazel woodland dominated southern and central Scotland throughout the Mesolithic period. Oak and alder were also locally dominant in some areas during the latter part of this period (Bishop et al 2015). Pollen diagrams from Airds Moss (Durno 1956), in the uplands of Central Ayrshire, and at Carnwath Moss (Fraser & Godwin 1955), a site located near Carnwath, Lanarkshire, at a height of 220m AOD, show that this type of woodland together with alder and hazel and occasional pine, elm, and oak was widespread in this part of Scotland.

The majority of charcoal analysed from Camps Valley came from pits dating to the Early to Middle Neolithic period. Hazel, alder, maloideae, and occasional blackthorn (*Prunus spinosa*) and oak were identified. The abundance of hazel in the charcoal assemblage is probably a reflection of its dominance in the environment. The additional presence of hazelnut shell in a number of the pits (Haston 2011; Timpany 2012a, 2012b) suggest that hazelnuts were undoubtedly an important food resource during the Neolithic period, as they were throughout prehistoric Scotland, and that the nuts may have been gathered simultaneously with fuelwood.

Interestingly, the Early to Middle Neolithic pits on the northern side of the valley were the only features locally to contain oak charcoal. The only other occurrences of oak were associated with the smithing deposits in the Iron Age enclosure at Woodend (Chapter 3) and occasional fragments in Neolithic pits and the Platform Settlement at Midlock Valley (Chapter 5). Its presence suggests that it was available in the area though perhaps not widely utilised. Given oak's suitability for a variety of different purposes, its relative absence in the charcoal assemblage is interesting. It is possible that oak was reserved for specific purposes such as smithing, seen at the Woodend site, or that other species with small branch wood were favoured due to the amount of time and effort required to process oak in comparison to small branch wood which was more readily available and abundant.

Blackthorn or sloe was also only present in pit C13-0012 dating to the Early to Middle Neolithic period, together with alder. Blackthorn is a spiny suckering shrub or tree, often found in woodlands where the canopy has been opened or in forest margins. It is common in scrub vegetation and along streams where it grows sometimes with alder (Stuijts 2005).

Charcoal from the later Neolithic / Chalcolithic pits revealed a similar presence of species to the Early to Middle Neolithic with hazel dominant alongside alder. Birch was notably absent in the Neolithic features being only present in two of the assemblages from the Late Neolithic / Chalcolithic periods, which is curious given that it is a good fuelwood. It was identified in one of the Mesolithic pits C11-0027 and was apparently widely used in the Early Bronze Age in Midlock Valley to the south (see Chapter 5). Birch is notoriously shade intolerant but copes particularly well in poor quality or shallow soils, if exposed to harsh weather conditions for prolonged periods and even at elevated altitudes (Austin 2009). Bishop et al (2015) remark that in contrast to hazel and oak, birch appears to be underrepresented in Scottish Mesolithic charcoal assemblages relative to its importance in the environment. It is suggested that its rarity may be due to the nature of combustion properties, as it is a fast burner and would perhaps have a lower chance of carbonisation than other species. However, it is also suggested the relative rarity of birch reflects the fact that other woods were preferred as fuel (ibid: 65). As birch was undoubtedly present in Camps Valley it is entirely possible that other species were favoured. Without a contemporary pollen diagram for this early period, it is unclear whether the absence of birch in the charcoal record is due to human factors such as differential selection, or ecological factors which would affect its local availability. Factors such as variations in topography, altitude, soil type, and quality for example might have promoted or limited the growth of certain tree species (Stuijts 2005).

During the Chalcolithic period there was little variation in the charcoal assemblage. Hazel, alder, birch, willow, and maloideae were identified. Interestingly willow (*Salix* sp.) was only present in pits located on the upper slopes of Mossy Dod. Willow favours wet conditions and is a characteristic tree of lowland parts often lining the banks of rivers (ibid).

As there are no dated pollen diagrams for Camps Valley prior to the Late Bronze Age, it is not clear whether the variation in species noted is significant and represents temporal change in woodland cover or other factors such as topography or differential selection. The features are spread over the full width of a valley and therefore certain species may not have been locally available as topographical factors such as variations in soil, slope, soil moisture content, and drainage might have promoted or limited the growth of certain tree species (Stuijts 2005).

The dominance of light demanding taxa in the charcoal assemblages suggests that the landscape in Camps Valley, from the Mesolithic to Chalcolithic periods was fairly open rather than dense woodland. The pollen evidence from the Camps Valley pollen core (Timpany 2015) discussed in Section 2.5.2, largely supports the data from earlier studies. Overall, the charcoal evidence suggests that larger trees, such as oak, ash, pine, and elm, all of which were identified in the pollen record, were largely avoided in favour of smaller, scrubbier taxa.

4.5 Discussion

4.5.1 Introduction

The excavations within Camps Valley provided a rare opportunity to investigate an upland valley from the ridgelines right down to the valley floors and the data collected allows some degree of comparison of activity types and distribution at a genuine landscape level. If the interpretation of the results had had to rely solely on the dating of the artefacts, a fairly narrow date range of features would have been assumed. Instead, the broad scope of the radiocarbon dating programme has established the presence of Mesolithic and Early Neolithic features which might otherwise have been understood to be later in date. The data revealed by the excavations suggests that there are scattered pits all across the slopes of Camps Valley and that only a small sample of these has been revealed during these works.

4.5.2 The Pits

The majority of the features recorded were small pits, spread across the valley slopes and all of a similar nature; shallow, usually about a metre in diameter, containing stony fills with small amounts of chert flakes and charcoal. All the features are either directly related to burning events (that is, they are the base or remains of temporary fire pits or hearths) or contain the discarded rakeout of hearths presumably located nearby which no longer survive. The evidence suggests that material that had been used as a fuel source was being deliberately buried.

The three Mesolithic pits were unexpected in this landscape but are not unique. A range of Mesolithic sites was discovered in Daer Valley 16km directly south of Camps Valley, on another tributary of the River Clyde (Ward 2017: 8). Two sites were discovered only 50m apart and lay high on a north facing hill slope at Coom Rig at 340m OD, with a view down to the Daer Water and the valley floor 1km away and to the east; a similar vista to that from the Mesolithic pit recorded in Camps Valley. The earliest Mesolithic feature recorded in Camps was roughly contemporary with the later of the two sites at Daer. The concentration of material recovered at the Daer Valley sites strongly indicates some attraction for returning to that spot on the hill (Ward 2010: 9–10), whereas the evidence from Camps suggests that while not returning to the same spot within the valley the Mesolithic huntergatherers returned to the valley more than once. Natural features such as water courses were being used as signposts to guide hunter-gatherers through the landscape to the locations in the Camps and Daer Valleys.

The majority of the pits excavated in Camps Valley were dated to the Neolithic period. Interpretations of the function of pit deposition has produced much debate with three contrasting schools of thought; pits either functioned for the dumping of domestic waste (Connolly & MacSween 2003: 43; Toolis 2011: 44) or were repositories which have been imbued with ritualistic meaning (Cook et al 2000: 108; Pollard 2001), or were 'neither wholly ceremonial nor completely mundane' (Brophy & Noble 2012: 63; see also Brophy 2006: 19; Kilpatrick 2015: 25). The Camps Valley pits conform to characteristic Neolithic pits found across Britain, being relatively shallow and deliberately backfilled, having few fills and containing pottery, lithics, and charcoal (Noble et al 2016: 182-3). It is difficult to differentiate between the contrasting categorisations of pits as being either domestic, or ritual or a combination of the two (ibid: 189) and easier to see them as products of various events whether routine or not, although the abrasion to most of the pottery fragments recovered in Camps Valley can be interpreted as evidence of a more utilitarian deposition.

Isolated pits or groups of pits dating to the Neolithic period are not uncommon finds during open area archaeological excavations. Often when these pits are uncovered they are the earliest phase of a palimpsest of activities (for example Simpson & Coles 1990: 43; Shepherd 1996: 40; Simpson 1996: 83; Cameron 2002: 68), and are interpreted as indicative of the popularity of that location for occupation (for example Alexander 2000: 67; Arabaolaza 2019: 34; Dingwall et al 2019: 133, 250; Spence 2019: 32). It is common to define them in clusters or groups of features, assuming that the pits in the cluster are contemporary even though frequently not every pit is dated or datable. They are often interpreted as representative of settlement; clusters of pits within a defined area that left no other archaeological trace such as a naturally open area or lightly constructed building for example (Alexander 2000: 66).

It is one of the benefits of the large scope of schemes such as this project that archaeologists get the rare opportunity to excavate a transect across several valleys and are able to compare the results. The next valley to the south, Midlock Valley, is rich in both prehistoric and historic activity. This will be discussed in more detail in the following chapter but excavations there show it was occupied for several millennia (see Chapter 5) with the multiple unenclosed platform settlements being the most densely distributed feature of this landscape. It is noted here that there are eight unenclosed platform settlements identified through survey in Camps Valley and the vast majority of them are small in number comprising no more than five houses compared to the density of settlement in Midlock Valley.

Ten features in the neighbouring Midlock Valley to the south were attributed to the Early–Middle Neolithic. The features comprised two post-holes, three linear ditches, and five pits, three of which were similar in size and type to the pits in Camps Valley. All of the features – bar one pit – were grouped around the 300m contour. The character of these features is different to the pits in Camps Valley – the clustering in only one area, the variety in the features – which is suggestive of a different type of activity. Further contrast is apparent in that no features were recorded during the monitoring of *c* 3.3km of access track associated with the wind farm in the landscape of Woodend (see Chapter 3) – a significantly different result to Camps Valley – and no Neolithic features were found in any of the other monitored areas. The longevity of the practice of pit digging within Camps Valley, the distribution and density of the pits and their absence or near absence in other valleys, points to the significance of this location in the Neolithic period, a significance emphasised by the presence of Normangill henge.

4.5.3 Special Locations

The presence of Neolithic pits as a precursor to significant later activity is noted at other sites in Scotland. At the Balfarg / Balbirnie ceremonial complex in Fife, which comprised timber mortuary structures, a henge, and a stone circle, the first recorded episode in a continuum of activity that spanned thousands of years was groups of Neolithic pits containing fragments of worked stone, pottery and charcoal (Barclay & Russell-White 1993: 167). The excavators speculated that the structures were the legitimation of later ceremonial activity which was enhanced by the use of places of earlier settlement (ibid: 168). At Meldon Bridge in Peeblesshire - a large Late Neolithic timber enclosure site located at the confluence of two rivers in the Upper Tweed Valley – the presence of Middle Neolithic pits, some of which contained pottery fragments and stone artefacts as well as charcoal, was taken as evidence of the first ceremonial activity on site (Speak & Burgess 1999: 105).

At the Blackshouse Burn Neolithic Enclosure between Biggar and Lanark, *c* 20km north of the Clyde Wind Farm development, a programme of survey, field walking, and trial excavation (Lelong et al 2005) found evidence of reuse of the landscape from the Early Mesolithic to the Bronze Age. The enclosure itself was located at the head of a small valley surrounded on three sides by hills and enclosed the sources of three small streams. It was in use during the Late Neolithic period (Lelong & Pollard 1998a: 41).

The scope of that programme of survey covered the slopes of the valleys from close to the valley floor to the ridgelines. The results revealed evidence of Late Mesolithic activity in the form of lithic scatters concentrated in the valley bottoms while the Late Neolithic saw more prolonged activity on slopes and into the uplands due to more sustained settlement there (Lelong et al 2005: 31). In contrast, the evidence from Camps Valley shows no such distinction of elevation with Mesolithic activity on high slopes *and* towards the valley bottom; and Neolithic activity spread throughout. This may be an indication that the activities in Camps Valley that produced the pits were not confined by settlement areas, and that the only constraints on the pit digging were the ridgelines of the valley itself which marked the boundary between outside and in.

Evidence of Neolithic activity in the form of pits and post-holes was recorded during works for the Calliachar Windfarm, 6km south of Aberfeldy, Perth and Kinross (Scott 2012). Although the features were located on the lower slopes of a valley, they were found at an elevation of nearly 500m AOD. This evidence suggests that more value can be obtained from comparing the position of sites within their landscape unit rather than comparing their elevations. Camps Valley is a distinct 'closed' landscape, where it is not possible to see up the valley from its entrance – any activities taking place within it could not easily be seen by those outside the valley, and the views from the valley slopes are concentrated within it. In contrast both Midlock and Clyde Valley, while contained within fairly steep slopes, are unobstructed at the ends and Woodend is located in a more 'open' landscape with gradual, rolling hills.

Camps Valley would have held a particular relevance to the people who visited it with the slopes and floor potentially being protected from settlement and the pits and temporary structures representing evidence of pilgrimage in and out of the valley. This special status would have existed long before the construction of the Normangill Henge (likely sometime after 3000 BC) which took place after the dates of most of the pits.

Where henges are constructed, they are rarely the first activity to take place at that location. For example, the Balfarg enclosure / henge surrounded an earlier structure and the Balfarg henge was preceded by pit digging (Barclay & Russell-White 1993: 47) and the North Mains, Cairnpapple, and Forteviot henges had monument predecessors (Younger 2016: 129). Henges would have been built with reference to the past and in particular to past activities at that location. The appreciation of the special nature of the location would have endured prior to the henge construction (Barclay 1999: 39). While henges referred to the past, they were also entirely new forms of monuments (Younger 2016: 133) and represented a remaking and redefining of the location. Normangill Henge itself was an expression in monument form of the reverence in which the landscape of Camps Valley was held, and evidence of new practices taking place at the location.

Monuments such as Normangill Henge may have functioned as gathering places for groups within the wider area (Lelong et al 2005: 32). It is the most southerly of four henges in the Upper Clyde Valley; Hillend (Canmore ID <u>47370</u>) and Westside (Canmore ID <u>47557</u>) are all located on the banks of the Clyde, while Weston (Canmore ID <u>48914</u>) is on the banks of a tributary of the Clyde. Balwaistie Henge (Canmore ID <u>48698</u>) just north of Biggar is next to a small stream that eventually flows into the Tweed. The location of these henges is a reflection of the importance of the Clyde Valley as a routeway through the landscape.

The importance of the discoveries in Camps Valley lies not in the pits themselves – the shallow nature of the features makes conclusive interpretations of their functions difficult – but in their distribution within the landscape and in the evidence of changes in the practices that took place in Camps Valley over time. While it cannot be suggested on the evidence here that the special significance of Camps Valley began in the Mesolithic, the importance of the valley was maintained through the Neolithic millennia. Over time the practices that took place here changed from pit digging and depositional acts to the creation of more permanent monuments reflecting the changing nature of the ways in which the significance of the valley was marked.

5.1 Introduction

An area of around 0.8 ha was stripped of topsoil across Midlock Valley (Illus 5.1) in relation to the construction of an access track, a substation, and the installation of electrical cables. On the southern side of the valley a combination of evaluation and monitored topsoil stripping during groundworks took place followed by targeted excavation of identified sites. The topsoil strip for the access track was up to 100m wide and was monitored up to the 400m contour. At the base of the access track an area 300m by 150m was stripped for construction of the substation. Cable routes for the original wind farm and extension ran down the northern slope of the valley and across the valley floor to this substation. These were subject to monitored topsoil strips and targeted excavation, as the route ran through the known site of an unenclosed platform settlement.

Midlock Valley ranges from 300m AOD on the floor up to 470m AOD along the ridgelines to the south and 420m AOD along the ridgelines to the north. It is narrower than Camps Valley with noticeably steeper slopes. These are currently used as rough pasture with some areas on the lower northern slope recently used for fodder crops. Midlock Water runs through the valley from east to west joining the River Clyde some 2.5km downstream. The excavations revealed evidence of multi-phase occupation from the Neolithic through to the medieval period on the northern side of Midlock Valley. A small cluster of features was located on a gravel knoll on the valley floor just north of Midlock Water, and an Iron Age settlement was located on a gravel terrace south of the river, with four additional features further up the less precipitous southern side of the valley, three of which were located on a natural plateau (Illus 5.2).

5.1.1 Radiocarbon Dates and Dating

The chronological framework for the sites has been produced using spot dates of finds and a programme of radiocarbon dating of material recovered from features. A total of 26 radiocarbon dates were obtained for 24 features across the valley (Table 5.1). One sample was obtained from burnt residue on a fragment of pottery, and one from a fragment of unidentified burnt bone; the remaining samples were from charcoal fragments, some of which were recovered from gullies and post-holes and are likely to have been incorporated into those features through natural processes such as erosion in the case of gullies or forming part of the material used to backfill a post-hole. It has been made clear in the descriptions of the features below which of the radiocarbon samples are secure and which are less so. The shallow depth of the features located on the gravel terrace and the fact that the fills were the result of water action indicate that the contextuality of the material recovered and dated in that location is unlikely to be secure. Despite this, the dates obtained provide an outline chronological framework for the various phases of activity. Comparing the dates in this table with those for Camps Valley a similar gap between 3300 BC and 2500 BC is noted.

5.1.2 Background

Midlock Valley contains a large number of recorded sites (Illus 5.3), mostly of either prehistoric or post medieval date and generally domestic in nature. It is notable for its Bronze Age unenclosed platform settlements – four settlements are located on the northern slopes of the valley and one on the southern. A total of nearly 60 individual house platforms are known within the valley which attests to extensive occupation on the slopes overlooking the river in the 2nd millennium BC.

By the entrance to the valley, three clusters of house platforms form the Normangill Rig UPS (Canmore ID 47402), the largest UPS in Lanarkshire (RCAHMS 1978: 23), spread out over 560m on the northern slope. The most westerly cluster is formed of two platforms, the central cluster eight platforms, and the most easterly cluster 12 platforms. At least 14 cairns are recorded on a terrace above the central cluster. On the opposite side of the valley to the central cluster of Normangill Rig is Corbury Hill UPS (Canmore ID 47391). This comprises 11 platforms with five cairns located to the southeast. About 900m south-east of the eastern platform cluster of Normangill Rig on the northern slope of the valley lies Mossy Dod UPS (Canmore ID 47399) comprising five platforms. Just over 500m to the south-east and still on the northern side of the valley is Whelphill UPS (Canmore ID 47401)



Illus 5.1 Location of sites in Midlock Valley. (© Headland Archaeology (UK) Ltd)

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comprising 19 platforms spread over 600m. Five hundred metres south-east of the eastern extent of Whelphill UPS is Whelphill Hope UPS (Canmore ID 79553) comprising 4 platforms. Another UPS (Canmore ID 79441) comprising 4 platforms is recorded on the southern slopes of Coupland Hill



Illus 5.2 Monitoring topsoil stripping for access track on southern slopes of Midlock Valley. (© Headland Archaeology (UK) Ltd)

just beyond the watershed and therefore outwith Midlock Valley. Like Normangill Rig and Corbury Hill UPS it is associated with two possible clearance cairns (Canmore IDs <u>79442</u> and <u>79550</u>).

Whelphill UPS is formed of three clusters of platforms, an eastern group of six located to the west of Whelphill farm on a steep slope, a central group of seven also on a steep slope, and a western group of six either side of a drystone dyke. Whelphill UPS was designated a scheduled monument in 1988 (SM4531); the designation covered the central and eastern clusters of platforms which were located on unimproved grassland. These upstanding features would be expected to have excellent preservation of environmental remains and even structural elements below ground as they have not been as disturbed by ploughing. The western cluster which was not included in the designation was only recorded during the survey for the M74 (Ward 1992: 113), where severe erosion of the platforms by cultivation was observed. This ploughing out appears to have taken place fairly recently as the area to the east of the drystone dyke is not shown under cultivation



Illus 5.3 Plan of known heritage assets around Midlock Valley. (© Headland Archaeology (UK) Ltd)

Lab Code	Context No	Material	Radiocarbon Age вр	Radiocarbon Date (95% probability)
SUERC-58820	03-0184	Charcoal: Corylus avellana	4930±31	3770–3650 cal вс
SUERC-70769	05-1133	Charcoal: Non-Oak	4895±30	3750–3640 cal вс
SUERC-70772	05-0018	Charcoal: Non-Oak	4762±30	3640–3385 cal вс
SUERC-70758	05-1100	Charcoal: Non-Oak	4706±30	3630–3375 cal вс
SUERC-70759	05-1235	Charcoal: Non-Oak	4625±30	3515–3350 cal вс
SUERC-70753	05-1299	Charcoal: Non-Oak	3927±30	2550–2300 cal вс
SUERC-70749	05-1072	Charcoal: Corylus avellana	3704±30	2200–1985 cal вс
SUERC-58829	09-0018	Burnt bone	3468±27	1880–1695 cal вс
SUERC-70763	05-1347	Charcoal: Non-Oak	3453±30	1880–1690 cal вс
SUERC-58830	09-0016	Charcoal: Corylus avellana	3417±30	1870–1630 cal вс
SUERC-70760	05-1074	Charcoal: Non-Oak	3350±30	1740–1535 cal вс
SUERC-70770	05-1106	Charcoal: Non-Oak	3300±30	1645–1505 cal вс
SUERC-70771	03-0292	Charcoal: Non-Oak	3296±30	1640–1500 cal вс
SUERC-70764	05-1108	Charcoal: Non-Oak	3265±30	1620–1460 cal вс
SUERC-58831	05-3226	Charcoal: <i>Betula</i> sp	3230±30	1610–1430 cal вс
SUERC-58822	05-0078	Charcoal: <i>Betula</i> sp	3222±30	1605–1425 cal вс
SUERC-70768	05-1031	Charcoal: Non-Oak	3212±30	1600–1420 cal вс
SUERC-70754	05-1055	Charcoal: Non-Oak	3157±30	1500–1320 cal вс
SUERC-58818	03-0366	Residue on pot	3129±30	1495–1300 cal вс
SUERC-58819	05-0091	Charcoal: Alnus glutinosa	3123±30	1490–1295 cal вс
SUERC-70750	05-1153	Charcoal: Non-Oak	2491±30	780–510 cal вс
SUERC-58824	05-3122	Charcoal: Corylus avellana	1838±29	cal AD 85–245
SUERC-58832	05-3206	Charcoal: Corylus avellana	1846±27	cal ad 85–240
SUERC-58828	05-3148	Charcoal: <i>Betula</i> sp	1806±29	cal ad 130–320
SUERC-58823	12-0250	Charcoal: Corylus avellana	1510±29	cal ad 430–620
SUERC-58821	03-0298	Charcoal: Corylus avellana	659±25	cal AD 1280–1390

Table 5.1 Radiocarbon determinations from Midlock Valley

on the OS first edition surveyed between 1856 and 1859 (OS 1864) but is depicted as such on the survey of 1896 (OS 1898). The cable routes for the Clyde Wind Farm and Wind Farm extension were designed to run between the central cluster of platforms and the western cluster, adjacent to the western boundary of the scheduled monument.

Evidence of agriculture was visible within the valley. The cairns noted above in association with the platform settlements of Corbury Hill and Normangill Rig may well relate to clearance for agriculture and may be contemporary with the settlements. Two abandoned farmsteads or crofts (Canmore IDs <u>47387</u>, <u>47414</u>) are noted on the southern side of the valley along with sporadic evidence of cultivation in the form of upstanding banks and rig and furrow (Canmore IDs <u>47405</u>, <u>47414</u>). Further upstream two post medieval farms, Whelphill (Canmore ID <u>184498</u>) and Harecleugh (Canmore ID <u>89689</u>), indicate an area well used for agriculture. At the head of the valley, upstream from Harecleugh, two cairns (Canmore IDs <u>48480</u>,

<u>48481</u>) and a cluster of three cairns (Canmore ID <u>48474</u>) are recorded – their date and function are unknown but they may relate to clearance. Other recorded features within the valley are an enclosure (Canmore ID <u>82641</u>) and three mounds (Canmore ID <u>79556</u>) of unknown date and function.

Prior to the wind farm construction these archaeological sites were known only through field survey and had not been investigated by intrusive means.

5.2 Archaeological results

The features recorded fit broadly into seven chronological categories: Early to Middle Neolithic activity, Late Neolithic to Early Bronze Age activity, a Middle Bronze Age UPS, two four-post structures of likely Early Iron Age date, a Late Iron Age settlement, an early historic metal-working site, and a medieval structure with associated enclosures. The results that follow will be discussed in ascending chronological order within each period. The majority of the features were located on the northern side of Midlock Valley where the UPS was the main focus of excavation, but there were a number of features which predated the settlement. Given the complexity of phasing within the structures, the different periods of activity are keyed by colour on the plans for clarity (Illus 5.4).

None of the platforms discovered during the investigation on the northern side of Midlock Valley were visible prior to excavation. The slope of the hill appeared to be fairly smooth, however, during the topsoil stripping it became apparent that there were several places where deep, stratified layers of soils were identified. These could usually be seen in the trench sections (one section is recorded in Illus 5.17 another in Illus 5.41 below). In some cases, the buried soils can be related to the location of individual platforms. These deposits illustrate the dynamic nature of the sediments on this part of the hillside where agriculture and the steep slope caused widespread movement of soils especially where the cuts of the platforms created sediment traps.

The section of cable route which ran between the central and western clusters of the Whelphill UPS was subject to targeted excavation ahead of the original wind farm construction, with a sufficient corridor cleared of archaeology to allow the cables to be ploughed into the backfilled ground. In practice, the soft nature of the backfilled ground caused some of the cables to be ploughed into virgin ground, outwith the cleared corridor. This necessitated an extension to the original excavation area to investigate the damage and record any extant remains. When the time came for the construction of the wind farm extension, another targeted excavation took place, this time rather than a single long strip the cable route was excavated in a succession of small areas, each backfilled once the archaeology had been recorded before the next area was opened. The route for the cables for the Clyde Wind Farm extension ran immediately parallel to the original route, with the result that in total an area over 30m wide on the northern side of the valley was excavated. The excavation to the east of the cable trench relates to the original wind farm and most of the excavation to the west relates to the wind farm extension works. Differences between the level of detail in the recording east and west of the cable route are accounted for by the narrow character of the initial trench affecting both the expectation and interpretation of the archaeology.

5.2.1 Early to Middle Neolithic Period

An isolated pit, C03-0183, was identified and recorded at the northern extent of the excavation (Illus 5.4), at 340m AOD, measuring 0.75m by 0.65m and 0.25m deep (Illus 5.5). It contained three fills from which a possible chert core, occasional fragments of oak charcoal, and significant quantities of charred hazelnut shell were recovered. The combination of material recovered was characteristic of the Early Neolithic period, and hazel charcoal from the primary fill C03-0184 produced a radiocarbon date of 3770–3650 cal BC (95% probability; SUERC-58820) supporting the interpretation. The pit is similar to some of the features seen within the Camps Valley (see Chapter 4).

A small group of features was identified during excavation of the platform settlement (see below) and are shown in green on Illus 5.11 below. The group consisted of two pits, C05-1134 and C05-1202, and two post-holes, C05-1124 and C05-1126, which lay in close proximity to each other and were sealed below deposit C05-1097 (which relates to Platform 5). Two of the features were also truncated by a ditch



Illus 5.4 Plan of features on the northern side of Midlock Valley. (© Headland Archaeology (UK) Ltd)



Illus 5.5 Plan and section of pit C03-0183. (© Headland Archaeology (UK) Ltd)

relating to another platform (Platform 3) further confirming their association with an earlier phase. The post-holes both contained quartz-tempered pot sherds identified as Neolithic Carinated Bowl pottery (see finds synthesis, this chapter). The other two features contained no artefactual evidence and little in the way of environmental material, however a fragment of non-oak charcoal from an in situ deposit was retrieved from pit C05-1134 and produced a radiocarbon date of 3750–3640 cal BC (95% probability; SUERC-70769).

A fragment of non-oak charcoal from the lower charcoal-rich fill of pit C05-1101 (Illus 5.6), located a short distance north-west of the cut for Platform 5, produced a radiocarbon date of 3630–3375 cal BC (95% probability; SUERC-70758).

A further cluster of features was recorded 12m to the east of the features described in the paragraph above, close to the limit of excavation (see Illus 5.11). A curvilinear feature, C05-0020, and two pits, C05-0033 and C05-0029, contained no datable artefacts or evidence to suggest whether or not they were contemporary with the platforms. A radiocarbon date of 3640–3385 cal BC (95% probability; SUERC-70772) was obtained from non-oak charcoal retrieved from feature C05-0020; however, the material is likely to have washed into the feature. These features have been assigned to the Early to Middle Neolithic period on the basis of the radiocarbon date, although it is noted that



Illus 5.6 View of charcoal-rich fill in pit C05-1101. (© Headland Archaeology (UK) Ltd)

the similarity of C05-0020 to the ring gullies of the Middle Bronze Age roundhouses may suggest that another roundhouse exists just beyond the limit of the excavation.

Four ditches and three pits were identified on the northern slope of the valley approximately 80m above the flood plain (Illus 5.4). One of the ditches, C03-1236, contained large fire-cracked stones and small fragments of non-oak charcoal, one of which produced a radiocarbon date of 3515–3350 cal BC (95% probability; SUERC-70759); it is possible that this material may have washed into the ditch. There was no other evidence to suggest a date or function of the other features and they are assigned to the Early to Middle Neolithic period on the basis of the radiocarbon date.

Further evidence of Neolithic activity was present in the form of a fragment of a polished Neolithic axe-head, which was recovered from the fill of gully C05-0076 in Platform 3 (Illus 5.11). The axe-head is interpreted as a residual artefact, but further attests to significant Neolithic activity in the immediate locale.

5.2.1.1 Early to Middle Neolithic Summary

The activities that formed the features assigned to this period appear to be one-off events like the events in Camps Valley taking place at the same time. There is however an impression of a difference in the nature of these events; the scarcity of features dating to this period even allowing for the possibility of later activities eroding earlier evidence, points to a contrast with Camps Valley.

5.2.2 Late Neolithic / Early Bronze Age Period

Evidence of activity during the Late Neolithic and Early Bronze Age was found in isolated features and small clusters of features spread across both the northern and southern slopes of the valley. The features were dated by radiocarbon determinations and the artefacts recovered from the fills, although some of the material used for dating was less than secure.

An isolated group of features was uncovered on the northern slope of the valley roughly 140m north above the flood plain (Illus 5.4). The features comprised a curving gully and a cluster of five pits to the east surrounded by a curving line of stake-holes (Illus 5.7). The group of five pits was densely clustered. The largest, C05-1073, was sub-oval in plan and measured 0.8m by 0.7m. It was up to 0.2m deep and filled by dark brown gravelly sand, C05-1072, which contained abundant quantities of hulled barley grain, a lens of charcoal-rich sand, fragments of burnt bone and several small pottery fragments, and is interpreted as resulting from deliberate deposition. A radiocarbon date of 2200-1985 cal BC (95% probability; SUERC-70749) was obtained from hazel charcoal recovered from this fill. The remaining pits were in very close proximity to each other and measured between 0.3 and 0.4m in diameter. Two pits, C05-1079 and C05-1081, located to the east of pit C05-1073 were intercutting, but the relationship was unclear as the fills were very similar, comprising dark grey-brown silty sand with charcoal, burnt bone fragments, and some fire-cracked stones. The fills also contained flint flakes and small fragments of 'domestic'-style Beaker pottery. The environmental evidence indicates that food preparation - including processing of wild foodstuffs (bramble seeds and hazelnut shells were also recovered from the fills of the pits) - took place in the area defined by the stake-holes. The five stake-holes formed a line curving downslope and are interpreted as a windbreak which would have protected the food preparation activities. It should be noted that although very broadly contemporary, the curving gully C05-1075 immediately to the west was dated to a few centuries later and is therefore described below.

A figure-of-eight-shaped pit, C09-0021, was located close to the foot of the southern slope of



Illus 5.7 Plan of Late Neolithic - Early Bronze Age features. (© Headland Archaeology (UK) Ltd)



Illus 5.8 Pit C09-0020 under excavation. (© Headland Archaeology (UK) Ltd)

Midlock Valley at c 320m AOD (Illus 5.1; Illus 5.8) shows the gently sloping hillside at this location). It measured 2.5m long and 1.3m wide and contained a charcoal-rich deposit along with a small amount of unidentifiable burnt bone (Illus 5.9a-b). Despite being very shallow with a deposit depth of only 0.1m the pit also contained fragments of pottery from what may be a Collared Urn (see finds synthesis, this chapter). The presence of the pottery in combination with burnt bone (however small the surviving fragments) may point to a cremation pit or a cremation related deposit. However, the fact that the burnt bone could not be identified to species and the presence of oxidised natural at the base of the pit, which is indicative of in situ burning, makes this interpretation tentative. Radiocarbon dating of

a fragment of the burnt bone from the pit produced a date of 1880–1695 cal BC (95% probability; SUERC-58829).

A group of features was recorded at the southern extent of the excavation area on the northern slope (Illus 5.4). A shallow gully, C03-1350, measured just over 3.6m long, 0.3m wide, and 0.1m deep, and was oriented north-east to south-west, curving to the east and south at its termini. An oval pit, C03-1340, and a narrow gully, C03-1346, running off it to the south were located to the south-east of gully C13-1350. A non-oak fragment of charcoal from the fill of gully C03-1346 produced a radiocarbon date of 1880-1690 cal BC (95% probability; SUERC-70763) but was probably washed into the feature. A stake-hole to the south of gully C03-1346 and an elongated pit to the east were also recorded in the group but contained homogenous and fairly sterile fills.

An isolated hearth C09-0016 (Illus 5.9c) comprising a spread of charcoal-rich silt overlying an area of heavily burnt subsoil lay furthest up the southern slope of the valley (Illus 5.1). Analysis of a fragment of hazel charcoal from the charcoal-rich material produced a date of 1870–1630 cal BC (95% probability; SUERC-58830).

Gully C05-1075 to the west of the food preparation area (Illus 5.7) was 8.2m long, up to 0.4m wide, and 0.2m deep and had a U-shaped profile. It curved on a radius of 5m but was truncated downslope by modern ploughing. The gully fill, C05-1074, was a mid-brown gritty sand



Illus 5.9 (a) Plan of feature C09-0020; (b) South-west facing section of feature C09-0020; (c) Plan of feature C09-0016; (d) Plan of feature C09-0024; (e) Plan of feature C09-0022. (© Headland Archaeology (UK) Ltd)

which contained occasional non-oak charcoal fragments, one of which provided an Early Bronze Age date of 1740–1535 cal BC (95% probability; SUERC-70760). Five fragments of pottery were also found in fill C05-1074 and identified as Neolithic Carinated Bowl wares by their fabric. The fill of the gully was interpreted as the result of the erosion of surrounding soil and it is likely that both the charcoal fragments and the pottery fragments were washed into the gully.

An oval pit, C05-1210, was located underlying features associated with the western end of Platform 3 (Illus 5.11 below) and measured up to 1.1m across and 0.2m deep. The fill of this pit contained fragments of charcoal along with fragments of Beaker pottery dating to the Early Bronze Age. It was cut at its northern edge by a larger oval pit, C05-1212, which measured 2m north to south by 1.3m wide. The difference in the colour of the fills in these two pits to the pits associated with the platforms indicated that they belonged to a different phase of activity.

In addition to the features producing Late Neolithic / Early Bronze Age radiocarbon dates, some undated features were likely to be of this period on the basis of association. A shallow oval pit, C09-0024 (Illus 5.9d), was located at around 310m AOD on the southern side of the valley (Illus 5.1) and contained a single charcoal-rich silt, heavily truncated. No artefacts were found with this feature to aid in its dating and interpretation. A small clearance cairn, C09-0022 (Illus 5.9e), measuring around 3.5m in diameter was located slightly further upslope at around 325m AOD (Illus 5.1). No dating evidence was recovered from the cairn. The cairn (Illus 5.10) is likely a remnant of agricultural activity such as stone clearance though without a scientific date the time period to which it belongs is unknown. Both features could fit with a Late Neolithic / Early Bronze Age date.

A small oval 'thumbnail' scraper dating to the Late Neolithic / Early Bronze Age was contained within a post-hole from Platform 2. While the post-hole is most likely contemporary with the platform, the presence of the scraper does provide further evidence of activity of this date in the area. As with the Neolithic axe-head mentioned above the presence of the scraper attests to the multi-faceted nature of the remains on the northern side of the



Illus 5.10 View of cairn C09-0022 during excavation. (© Headland Archaeology (UK) Ltd)

valley and the level of disturbance of earlier deposits that took place.

5.2.2.1 Late Neolithic / Early Bronze Age Summary The features assigned to this period suggest the beginnings of domestic activity and agriculture and may represent the start of settlement within the valley.

5.2.3 Middle Bronze Age

All or part of four platforms (Platforms 2, 3, 4, and 5) were uncovered during the excavation, forming part of a larger unenclosed platform settlement extending 500m by 100m across the northern slope of Midlock Valley (Illus 5.4). None of these platforms were visible prior to excavation. Platforms 2, 3, and 5 can be grouped with the central cluster of seven platforms in Whelphill UPS, while Platform 4 appears to belong to the western cluster of six platforms. The platform numbers (2, 3, 4, and 5) were assigned during the writing of the Data Structure Reports. They do not represent the chronological, locational, or excavation sequence. This publication maintains the numbering system in order to provide concordance with the archive.

5.2.3.1 Platform 5 (Illus 5.11)

Platform 5 was located at 305m AOD on the northern slope of the valley. The platform was excavated over two separate phases of work four years apart, and as a result there are some differences between what was seen in each half. A line of damage

relating to cable ploughing also cut through the platform from north to south (shown in grey on the plan). Where it was best recorded, the platform comprised a platform cut, a narrow outer gully, two parallel rows of stake-holes defining a wall, and a post-ring of three post-holes (Illus 5.11). Internal features of pits, stake-holes, more post-holes, and a hearth were also recorded. In general, the features of this platform were not as well preserved as the others and the interior layout is not well understood. The cut C05-0155 for the platform measured 11m long along the contour of the slope and 4.8m wide, although it had been truncated by the cut for Platform 3 to the south (presumably once the former had been abandoned). The platform cut was filled by a grey-brown sandy silt C05-1094 containing sherds of Middle Bronze Age coarseware pottery and occasional charcoal fragments. This fill likely resulted from the movement of sediments from upslope, filling the scarp once the roundhouse had been abandoned.

Two concentric rows of regularly spaced stake-holes defined the wall of the roundhouse (Illus 5.12). The outer row, C05-1109, comprised 16 stake-holes, on average 0.3m apart, while the inner row, C05-1110, comprised 11 stake-holes, on average 0.4m apart.

A narrow curving gully, C05-1107, was located immediately outside the outer stake-holes and closely followed their curve. The gully was exposed over a distance of 4.5m and was up to 0.25m wide and 0.25m deep. The best-preserved section which was towards the gully's north-east end, adjacent to the cable trench, was 0.15m wide with near vertical



Illus 5.11 Plan of Platform 5, Platform 3, and Structure 2. (© Headland Archaeology (UK) Ltd)



Illus 5.12 View of Platform 5. (© Headland Archaeology (UK) Ltd)

sides and a flat base. The gully petered out towards the south-west, possibly through truncation and may have continued onto the eastern half of the platform, although it was not seen during excavation in this area. Non-oak charcoal retrieved from the fill of the gully provided a radiocarbon date of 1620–1460 cal BC (95% probability; SUERC-70764) and is thought to come from secure material.

The stake-holes are interpreted as the remains of the inner and outer wattle faces of a wall. Thin branches or slats would have been woven horizontally between the upright stakes and combinations of turf, earth, and/or stone would have been packed between them forming the outer wall of the roundhouse. The profile of the gully suggests that it also contained a fence or upright panel of some form, potentially forming a facing to the earthen core wall. If contemporary with the stake-holes then it is unclear why such a facing was required, particularly at the rear of the building



Illus 5.13 Packing stones in post-hole C05-1122. (© Headland Archaeology (UK) Ltd)

where it would not have been visible. It is likely to represent a different phase of construction on the platform.

The evidence for internal supports was limited as only four post-holes, C05-1116, C05-1122,

A hearth was located immediately to the north of post-hole C05-1128. It was identified as an oval area of scorched soil, C05-1106, measuring 0.9m by 0.8m and 0.06m deep. The area contained some burnt bone fragments and non-oak charcoal; a fragment of the latter produced a radiocarbon date of 1645-1505 cal BC (95% probability; SUERC-70770). This is a very similar date to that from gully C05-1107 and gives a confident date of construction and use in the Early to Middle Bronze Age for Platform 5. The area of scorched soil was part of deposit C05-1097, a spread of sediment interpreted as a floor surface. The spread's wedge-shaped profile (not illustrated) deepened to the south and it may represent the remnants of the apron deposit used to form a level platform. The proximity of the hearth to the post-hole would have presented an obvious fire risk if they were contemporary. Their juxtaposition points to multiple phases of activity on the platform.

An elongated group of stake-holes, C05-1142, was recorded in a rough north-south line to the east of the hearth, although evidence of further stake-holes to the east may have been lost due to cable damage. They lay within an area measuring 3m north to south by 0.5m wide and may represent internal divisions within the structure. The stake-holes appear to define deposit C05-1097, a floor surface, and may relate to a specific activity taking place in that area, though no evidence for this was recovered. Further posts and stake-holes were found in the eastern part of the platform and likely had a similar function, although they formed no obvious arrangement.

Some 2m west of gully C05-1107 and outside the platform was an oval area of reddish heataffected sub-soil C05-1099. The area measured 0.8m by 0.65m wide and contained some charcoal flecks. This scorched area indicates the location of a hearth, although any remains of the hearth itself do not survive. Surrounding the hearth location, and in particular to the south there was a cluster of stake-holes extending over an area of around 3m by 1m. There appears to be no obvious pattern to their layout, but they are thought to be associated with the hearth. The features were not radiocarbon dated and could be associated with either the platform area or a Neolithic pit C05-1101 to the north-east given their proximity to both. Previous excavations of platform settlements have not extended beyond the platform itself, so it is not known whether Bronze Age features outwith the platforms are typical.

5.2.3.2 Platform 4 (Illus 5.14)

Platform 4 was cut into the northern slope of Midlock Valley at 318m AOD, 30m above the flood plain and 70m further upslope from the other three excavated platforms. It comprised a platform cut, two parallel rows of stake-holes that defined the outer wall at the rear of the structure, and part of an inner post-ring comprising five post-holes. Internal pits, stake-holes, and a hearth were also present. Unlike the other platforms (Platforms 2, 3 - see below -, and 5, see above), no gullies were found in association with the stake-holes. The remains represented the rear half of the structure; the front apron, which was formed from material excavated from the cut of the platform, had eroded away and any evidence of structural elements or internal features constructed there had been lost. Broadly speaking, the dating evidence suggests the structure was in use between 1500 and 1300 BC.

Fully exposed, the platform was defined by crescent-shaped cut C05-1028 dug into the hillside, which measured 10.5m east to west, 6m north to south, and up to 1m deep (Illus 5.15). The cut sloped down gently at first with a break to a steeper incline in the lower half, and the slope of the cut was very distinct following excavation. Within the cut for the platform, two concentric rows of regularly spaced stake-holes up to 0.12m deep defined the wall of the structure and mirrored the arc of the break of slope at the base of the platform cut which lay around 0.5m to the north (Illus 5.16). The outer row, C05-1049, was incomplete with both the western end and a 2.5m wide gap in the middle missing, and the stake-holes in general were shallower than the inner row. It seems unlikely this gap was deliberate since the wall material would have subsided exposing the interior of the roundhouse. The inner row, C05-1050, was 9m long and comprised 22 stake-holes up to 0.3m apart. A band of loose





Illus 5.14 Plan of Platform 4. (© Headland Archaeology (UK) Ltd)

stones, C05-1027, was recorded along the base of the platform cut (Illus 5.17) and was interpreted as the slumped remains of the wall material between the two rows of stake-holes, with C05-1029 likely to be further forward slumping of this material.

The remains of a post-ring comprised five post-holes, C05-1086, C05-1063, C05-1065, C05-1054, and C05-1023, which formed a line concentric with the curvature of the wall. Traces of a post-pipe were recorded in C05-1086 and possible packing stones were recorded in three of the post-holes, C05-1023, C05-1054, and C05-1065. Post-hole C05-1067 is interpreted as a repair of C05-1054 immediately to the north.

Some 50 stake-holes were recorded scattered across the middle of the platform. The stake-holes were between 0.05m and 0.15m deep, and 0.03m and 0.09m in diameter. Apart from one group in the east, which may relate to the hearth, the arrangement of the stake-holes did not indicate any clear configurations, and may relate to different phases of activity in the platform.



Illus 5.15 View of Platform 4 showing crescentic scarp cut into hillside. (© Headland Archaeology (UK) Ltd)

The hearth, C05-1055, and a small oval pit, C05-1058, were located in the north-eastern part of the platform. The hearth was identified through reddened heat-affected geological subsoil beneath a deposit of black sandy silt covering an oval area 0.5m by 0.7m. The deposit contained abundant



Illus 5.16 View of stake-holes and post-holes in Platform 4. (© Headland Archaeology (UK) Ltd)



Illus 5.17 East facing section through Platform 4. (© Headland Archaeology (UK) Ltd)

fragments of unidentified burnt bone and charcoal; a fragment of non-oak charcoal from the hearth produced a radiocarbon date of 1500–1320 cal BC (95% probability; SUERC-70754). The charcoalrich nature of the fill of the small oval pit may indicate that it functioned as an ember pit used to store the glowing embers of a fire overnight. The location of the hearth seems strange. It was located less than 0.5m from one of the structural posts, C05-1054, creating an obvious fire risk. This might have been mitigated through the use of some form of barrier protecting the post, but it is also possible that the hearth and the post are from two different phases.
A large sub-rectangular pit, C05-1033, was located just inside the western side of the post-ring and measured some 2m by 1.1m. The pit was generally 0.15m deep and filled with brown sandy clay. The fill contained one roughout and two conjoining part-perforated discs of cannel coal representing the initial stages of fastener manufacture. These fragments were part of an assemblage of 168 pieces of worked cannel coal recovered on site - one of the most interesting finds from the entire project and one of the most important cannel coal assemblages found in Scotland, since it includes evidence of nearly all the stages of production (see finds synthesis, this chapter). Fragments of cannel coal were recovered from the other platforms, but the majority of the material came from this platform. The majority of the material came from two pits, C05-1033 and C05-1035, while other material was recovered from the fill of shallow depressions and post-holes. It is unlikely that these fragments were deliberately deposited in the features and more likely they worked their way into the fills after being casually discarded.

An ill-defined ledge in the natural subsoil was observed to the west of Platform 4 and this is interpreted as the possible remains of a track which led to the platform and gives some indication of how the roundhouses were accessed, though this position to the north-west of a roundhouse would be an unusual location for an entrance and there was no evidence of post-holes framing such an access. On the opposite side of the platform on the south-east a cluster of three pits, C05-1019, C05-1021, and C05-1025, was uncovered just inside the post-ring. All the pits were very shallow at about 0.07m deep. However, they were located near the eroded edge of the platform and it is likely that they represent the remains of heavily truncated features. The larger pit, C05-1021, contained a fragment of a quern stone and the fill of one of the smaller pits, C05-1019, contained a small sherd of undiagnostic pottery.

A thin fragmented spread of silty clay with charcoal inclusions, C05-1011, covered the floor of the platform (Illus 5.17). This is likely to be the remains of an occupation deposit. It was better preserved towards the back of the platform, where it had accumulated in a series of four shallow depressions all less than 0.1m deep, C05-1039, C05-1048, C05-1047, and C05-1041. These are

likely to be undulations in the surface rather than deliberately cut features as the truncation in this area of the platform is minimal. However, they formed pockets where the occupation deposit had accumulated and a high proportion of the finds were retrieved from these areas. A fragment of non-oak charcoal retrieved from depression C05-1048 produced a radiocarbon date of 1600–1420 cal BC (95% probability; SUERC-70768). While the fragment was unlikely to be in situ, the date it produced is in keeping with the other Middle Bronze Age date from the hearth (above).

The presence of the cannel coal assemblage indicates that Platform 4 functioned as a workshop for the production of cannel coal fasteners / eyelets. However, the evidence of the quern and pottery fragments also points to a domestic function. The possible access track may have linked the roundhouse to the cluster of roundhouses to the west.

5.2.3.3 Platform 3 (Illus 5.11)

Platform 3 lay at 305m AOD and was located immediately to the south of Platform 5 which it truncated. There was no evidence for the cut for the platform. The platform comprised a curving ditch, considerably wider than the narrow gully of Platform 5, within which two rows of stake-holes were located defining a wall, and six post-holes forming part of a post-ring. Internal features such as pits, stake-holes, ditches, and two hearths were also recorded. In plan, it was the most substantial example of a platform excavated (Illus 5.18), but also the least typical in terms of layout. Similar to Platform 5, it was partly cut through by the modern cable trench.

Two concentric rows of regularly spaced stake-holes defined the wall of the roundhouse. The outer row, C05-1216, was 11.2m long and comprised 33 stake-holes, up to 0.4m apart. Evidence of repair to the wall was indicated by further lines of stake-holes to the west and north-west of the line. Some stake-holes were a lot closer together than the others which may also indicate repair.

The inner row, C05-1217, was 10m long and comprised 47 stake-holes, generally 0.2m apart. As with the outer row, evidence of repair to the wall was indicated by a second line of 11 stake-holes some 3.2m long mirroring the original line on the inside. Again, some of the stake-holes were close together,



Illus 5.18 View of Platform 3. (© Headland Archaeology (UK) Ltd)

suggesting repair. The stake-holes survived better towards the south-west end where the subsoil was slightly softer than the very compact clayey subsoil to the north-east.

Parallel to the wall of the structure a concentrical curving ditch, C05-0090, measuring 1m wide and 0.45m deep with steeply sloping sides and a flat base enclosed a D-shaped area some 16m long by 6m wide. A shallow offshoot cut, C05-0076, was located on the eastern end of the ditch (the fragment of Neolithic stone axe was recovered from this offshoot). A complete or near complete Bronze Age pot was uncovered in the eastern end of ditch C05-0090, crushed but in situ (Illus 5.19), and was most likely intact when it ended up in the ditch. Residue from the pot provided a radiocarbon date of 1495-1300 cal BC (95% probability; SUERC-58818). This provides an accurate indication of the date of the abandonment of the structure given the security of the material from which it came. A fragment of birch charcoal recovered from the fill of the ditch C05-0090 produced a radiocarbon date of 1605-1425 cal BC (95% probability; SUERC-58822) a very similar date to that of Platform 5



Illus 5.19 View of gully C05-0090 with pottery in situ. (© Headland Archaeology (UK) Ltd)

which suggests the material washed in from that platform, and a more secure date is provided by the pottery residue. The fills of the ditch also contained charred hazelnut shell, prehistoric grain, and a fragment of whetstone. The upper fill of the ditch contained stone fragments which may be the remains of tumble from the roundhouse walls.

The purpose of the ditch may have been to channel water from upslope away from the roundhouse and to provide material for the apron at the front of the platform. The relationship between the ditch C05-0090 and deposit C05-1097 (the possible apron deposit for Platform 5) is unclear. It would be expected that excavators of the ditch would have had to contend with the apron deposit of Platform 5. They did not dig a ditch that reflected the contours of the apron, that is a ditch that shallowed in its central section. Instead, ditch C05-0090 is fairly uniform in its profile and plan. This indicates either the ditch was wider and deeper where it cut through the apron, or the apron did not exist at the time of the excavation of the ditch.

Similar to Platform 4, part of a post-ring survived, comprising six post-holes, C05-0301, C05-1190, C05-1176, C05-1178, C05-1160, and C05-1208. They were between 0.35m and 0.6m across and between 0.2m and 0.35m deep, except for post-hole C05-0301, which was shallower and is likely to have been truncated. It was also the only example which did not have packing stones. No post-pipes were visible.

An almost continuous curvilinear ditch was situated in the space between the inner wall face and the post-ring. It comprised two lengths, C05-1148 and C05-0122, with a 1m gap between them. The ditch measured between 0.5m and 1m wide and was up to 0.5m deep with gently sloping sides. The cut was filled with rough stone slabs, C05-1150, up to 0.8m across, which appeared to have been deliberately deposited to form a roughly paved area within the ditch (Illus 5.20). There were fewer stone slabs towards the east of the ditch where the stones



Illus 5.20 View of stone slabs C05-1150 in ditch C05-1148. (© Headland Archaeology (UK) Ltd) SAIR 104 | 67

were smaller and appeared as rubble rather than a paved surface. No stone was present in the fill towards the south-eastern end of the cut.

A series of features were located within the post-ring, including evidence of two hearths fairly close together. The first hearth comprised a subcircular area 0.3m in diameter of scorched subsoil, C05-1198, located some 1.5m north-east of the centre of the building. The second hearth lay around 2m to the south-west and was an oval area of scorched sediment, C05-1186, some 0.7m by 0.25m wide, which contained rare fragments of charcoal and burnt bone. A group of nine stake-holes was located between the hearths. Seven of these stakes formed two parallel rows aligned east to west and may have served to partition the cooking areas.

Near the centre of the building was an oval pit, C05-1168, measuring 1.05m by 0.65m by 0.25m deep and with edge-set stones present on the eastern and northern sides of the cut, the eastern of which was heat-affected. These stones might be remains of a stone-lined rectangular box some 0.45m by 0.3m. It is possible that stones forming the other side of the box had been removed through ploughing as plough scars were seen on both sides of the pit. The brown silty fill, C05-1167, contained a fire-cracked stone, occasional burnt bone fragments and charcoal. The pit may have functioned as an ember box, similar to the pit seen adjacent to the hearth on Platform 4.

Further pits and post-holes were excavated and recorded within the post-ring but provide limited detail on function or activities taking place. Of particular interest was pit C05-1182, which contained 29 sherds of prehistoric flat-rimmed ware pottery including base-sherds, body-sherds, and rim-sherds, and is interpreted as the deposition / discard of waste material.

Like the other platforms, the lower half including the apron had largely been truncated through erosion caused by cultivation, as evidenced by the plough furrows seen cutting into the geological subsoil at the southern edge of the platform. However, a deposit likely to represent the remains of the apron survived in the form of a patch roughly 1.8m across comprising a dumped deposit of brown silty gravelly sand, C05-1185, up to 0.1m deep.

The platform was filled by a deposit, C05-0093 (not illustrated), of loose black fine silty sand with a high concentration of charcoal and areas of red

oxidised silt. The deposit was up to 0.15m deep at the back of the platform and merged into a thin spread towards the eroded edge of the platform to the south. In the areas towards the back of the platform the deposit contained several fragments of finger-sized round wood. A Bronze Age pot (V75; not illustrated) could be partially reconstructed from pottery fragments recovered from this fill. This deposit represents burnt material possibly from a wattle fence mixed with occupation deposit, but it was not possible to distinguish between the two as they were both very similar. Wild taxa including vetches, mustards, corn spurrey, and plantains were recovered from the environmental samples from Platform 3. These plants are commonly associated with disturbed and arable ground (see environmental synthesis, this chapter). It is likely that once the platform had been abandoned the platform cut was used for the deposition of occupation waste from other platform settlements nearby and that weeds subsequently grew in the waste material. A deposit of hillwash, C05-1103 (not illustrated), up to 0.3m deep overlay deposit C05-0093. This hillwash material was not dated but must postdate the abandonment of the settlement.

5.2.3.4 Platform 2

Platform 2 was the most southerly and the lowest in altitude of the platforms excavated and was located 9m south of Platform 3 at 300m AOD (Illus 5.21). It comprised a platform cut, within which were two narrow gullies, two lines of stake-holes defining a wall, and four post-holes forming part of a post-ring, along with a number of other internal features including a hearth. The highest quantity of worked stone (not cannel coal) found during the excavation came from features within Platform 2. It included a small oval scraper of Early Bronze Age date which is interpreted as a residual find.

Platform 2 was defined on its upslope edge by cut C05-0050. The cut extended beyond the limit of excavation to the east and was uncovered in the wind farm extension to the west of the cable damage as a wide shallow feature. The cut sloped down at an angle of around 15 degrees over about 4m. The flat part of the platform lay below this and extended over an area of at least 9.7m in diameter.

Within the cut of the platform, two concentric rows of regularly spaced stake-holes defined the



Illus 5.21 Plan of Platform 2 and medieval structure and enclosures. (© Headland Archaeology (UK) Ltd)

wall of the roundhouse. The stake-holes were up to 0.12m deep and were spaced between 0.35m and 0.9m apart. The rows were 0.6m apart. Like the stake-holes in the other platforms they represent a wattle fence built to contain a turf, earth, and/ or rubble wall. Steep sided narrow gully C05-0310

to the west appeared to continue the alignment of the inner row of stake-holes. The presence of roundwood charcoal within the fill and the shape of the profile indicate the gully likely functioned to contain a fence or upright, something not seen with the interior line of stake-holes on other platforms.



Illus 5.22 View of Platform 2 showing post-ring. (© Headland Archaeology (UK) Ltd)

Gully C05-0079 was located immediately to the exterior of the outer row of stake-holes. Where the edges could be defined, it had a very steep profile and was up to 0.25m deep. Non-oak charcoal retrieved from the fill of the gully was radiocarbon dated to 1640–1500 cal BC (95% probability; SUERC-70771). The similarity of gully C05-0079 to gully C05-1107 also suggests some function to hold an upright panel and indicates more than one phase of structures on the platform.

Within the platform there were nine features which could confidently be identified as post-holes, and a further six features which were classified as pits. Post-holes C05-0070, C05-0084, and C05-0086 were similar in size being 0.4m in diameter and 0.45m deep and formed part of the post-ring of the structure (Illus 5.22). Pottery sherds of Middle Bronze Age coarseware were recovered from fill C05-0087 of post-hole C05-0086. Two other post-holes, C05-0035 and C05-0062, may also be part of the post-ring. The other four post-holes may represent repairs, although their relationship to the structure is unclear.

A shallow-sided hollow, C05-0097, was located within the interior of the structure and is thought to be the result of wear rather than a deliberate cut. To the south-east of the hollow was an area of burnt natural which represents a hearth, overlain by deposit C05-0091, a clayey silt. Despite the obvious burning of the natural below, deposit C05-0091 did not contain large amounts of charcoal and as a result is interpreted as the compacted ashy rake-out from the fire. A radiocarbon date of 1490-1295 cal BC (95% probability; SUERC-58819) was obtained from a fragment of alder charcoal recovered from deposit C05-0091. The hearth area was surrounded by 17 stake-holes, some of which roughly marked the limits of burnt ground and could have held uprights for suspending cooking vessels. The other stake-holes formed a line running south-west

to north-east and perhaps separated a cooking area from the remainder of the space within the structure.

Six features within the platform are interpreted as pits. Samples taken from these pits do little to elucidate their use – all contain some amount of charcoal, although C05-0064 contained a small amount of naked barley. The proximity of this pit to the hearth suggests storage of cooking materials, however the grain could equally have accidentally strayed into the fill of the pit from the fire. In general, the contents and arrangements of the pits do little to suggest that there were specific areas of activity within the structure.

At the northern limits of the platform, large amounts of stone were present along the base of the platform cut. Although the natural subsoil in this location was very stony, these stones did not appear to be naturally occurring. It is not clear if the stones were intended to line the platform cut or if they were tumble from the core of the wall defined by the stake-holes.

5.2.3.5 Unenclosed Platform Settlement Summary

In summary, four structures were excavated spread across the northern slope of Midlock Valley. These structures were part of a wider settlement comprising at least six structures to the west and 13 structures to the east; the full extent of the settlement cannot be defined on the basis of current knowledge. The structures were formed of post-rings which would have supported a conical roof and an outer wall constructed of two parallel wattle fences filled with packed stones, turf, and earth. The fences would have been constructed from hazel and birch whose fast-growing stems were ideal for smallscale structures (see environmental synthesis, this chapter). Within the houses, hearths were defined by stake-holes and smaller post-holes which seem to relate to the division of space. Shallow pits and spreads were also present in most of the platforms and stone-filled ditches were present in Platform 3 but not in the other platforms.

The dating evidence indicates that the structures were constructed, occupied, and abandoned in the Middle Bronze Age between approximately 1600 and 1300 BC. The radiocarbon dating of material from Platform 5 provides the most secure evidence, suggesting it was occupied between 1650 and 1500 BC, while the other three platforms are dated between 1500 and 1300 BC.

5.2.3.6 Middle Bronze Age Feature

Potentially broadly contemporary with the UPS, but some distance away to the south of the Midlock Water, pit C05-3227 is tentatively dated to the Middle Bronze Age (see Illus 5.37 below). Its fill contained several large stones, including a saddle quern, which were laid over a large number of sherds of pottery representing a substantial part of a single vessel (identified as prehistoric but otherwise undiagnostic). A fragment of birch charcoal from the fill of the pit was dated to the Middle Bronze Age; 1610–1430 cal BC (95% probability; SUERC-58831). The contextual security of the charcoal is unclear and it may have been washed into the pit; however, the presence of the saddle quern makes a Middle Bronze Age date entirely feasible.

5.2.4 Iron Age

5.2.4.1 Iron Age Four-Post Structures

Two four-post structures – Structure 2 (Illus 5.11) and Structure 3 (Illus 5.4) – were identified on the northern side of Midlock Valley. Each structure comprised four post-holes which measured c 0.5m in diameter and had steeply sloping sides and a curved base. Structure 2 formed a rectangle measuring 2m by 4m and Structure 3 formed a rectangle measuring 2.5m by 3m. All but one post-hole of Structure 3 had one edge more gently sloping than the others indicative of disturbance where the posts had been



Illus 5.23 View of post-hole in Structure 3. (© Headland Archaeology (UK) Ltd)

removed. The fills of the post-holes in Structure 3 contained medium-sized stones which could have functioned as packing stones but had been disturbed when the posts were removed (Illus 5.23). Post-defined rectangular structures are commonly associated with Iron Age settlement sites and the radiocarbon dating of non-oak charcoal retrieved from post-hole C05-1154 of Structure 2 produced a date of 780-510 cal BC (95% probability; SUERC-70750). However, a radiocarbon date of 2550-2300 cal BC (95% probability; SUERC-70753) was obtained from non-oak charcoal retrieved from post-hole Context 03-1298 of Structure 3. In neither case was the contextual security of the sample certain, but on balance and from a typological point of view, the structures are most likely to be Early Iron Age in date.

5.2.4.2 Late Iron Age Settlement

A number of gravel terraces (Illus 5.24) are located on the southern side of the floodplain of the Midlock Water. One of these was occupied by a roundhouse comprising a penannular ring-gully, a post-ring, and a possible four-post porch, and an annex formed by an adjoining ring-gully on the eastern side (Illus 5.25). Two radiocarbon dates obtained from the features indicate the structures belong to the Late Iron Age.

The post-ring was formed of 11 evenly spaced post-holes, forming a diameter of just over 5m. Packing stones were present in situ in many of the post-holes (Illus 5.26), suggesting the posts had been left to decay rather than removed. The fills of the post-holes mostly comprised mid-brownish-grey silty clays. Birch, hazel, willow, maloideae, and alder charcoal were identified from two of the post-hole fills, including post-hole C05-3115, illustrated here (Illus 5.27). The post-ring was enclosed by a concentric shallow ring-gully, C05-3114. The function of the ring-gully, which appears to have been an open feature rather than a filled foundation trench, is unclear. A short section of a similar gully,



Illus 5.24 View of gravel terrace south of Midlock Water. (© Headland Archaeology (UK) Ltd)



Illus 5.25 Plan of Iron Age roundhouse and annex. (© Headland Archaeology (UK) Ltd)



Illus 5.26 Packing stones in post-hole C05-3165. (© Headland Archaeology (UK) Ltd)



Illus 5.27 Section of post-hole C05-3115. (© Headland Archaeology (UK) Ltd)



Illus 5.28 Section of post-hole C05-3133. (© Headland Archaeology (UK) Ltd)

C05-3142, was present within the interior on the western side and may be evidence of an earlier shallower ring-gully.

The entrance to the structure was framed by two pairs of post-holes, one pair was set in the gap in the ring-gully, the other was positioned less than a metre behind. This arrangement may suggest the presence of a turf wall less than a metre thick located immediately within the ring-gully, although no trace of such a wall was observed. The post-holes had been heavily truncated as seen in the profile of post-hole C05-3133 (Illus 5.28).

A shallow hollow in the northern half of the structure, within the post-ring, was interpreted as a hearth and contained a black charcoal-rich deposit, C05-3148. Birch charcoal from the hearth was dated to cal AD 130–320 (95% probability; SUERC-58828), placing the structure in the Late Iron Age. Four stake-holes were revealed on the edge of the hollow and contained similar charred material – they are interpreted as evidence of a structure associated with the hearth.

The annex was formed by another ring-gully, 8m in diameter. The ring-gully was slightly wider and was filled with a darker material than the adjoining ring-gully, suggestive of a more organic-rich deposit. There was no stratigraphic relationship between the two ring-gullies, and the function of the annex gully was no clearer than that of the roundhouse itself. The annex contained a single shallow pit, C05-3201. The lack of post-holes within the annex suggests it was an unroofed enclosure, with a possible fence line located to the inside of the ring-gully, although no traces of a fence were observed. A short distance to the east, outside the annex, another larger oval pit, C05-3207, contained three sherds of pottery, which could not be identified beyond a general prehistoric date. Hazel charcoal from the fill of the pit was dated to cal AD 85–240 (95% probability; SUERC-58832), but is likely to have resulted from washed in material.

5.2.4.3 Iron Age Summary

Iron Age structures were uncovered on both sides of the valley although it is unclear how they relate to each other. The presence of these structures, which are likely to have been domestic in function, was not visible prior to the wind farm construction commencing.

5.2.5 Early Historic Metalworking

A cluster of nine pits lay on a gravelly knoll (Illus 5.29) on the valley floor north of the Midlock Water, and were associated with evidence for metalworking. Six of the pits were very similar in size and shape and three of them were intercutting. The intercutting pits, C12-0011, C12-0009, and C12-0014 (Illus 5.30), appeared to be contemporary, and the westernmost of the three had a layer of in situ compacted charcoal in the base. All three pits showed evidence of in situ burning of the natural subsoil, and the fills of the other two pits were also rich in charcoal and fire-cracked stone (Illus 5.31).

The three discrete pits to the south were a little larger (and probably better preserved) but essentially displayed the same sequence of fills. The easternmost pit, C12-0249 (Illus 5.32), and middle pit, C12-0251, contained relatively thick basal layers of charcoal. They were all less than 0.2m deep and were probably truncated. The middle pit, C12-0251, contained two fragments of plano-convex slag cake, possibly representing two individual cakes. It is possible that they are either fragments of a furnace bottom used for smelting, or pieces of superimposed hearth bottoms. The fills are interpreted as secure and a fragment of hazel charcoal retrieved from the fill of pit C12-0251 produced a radiocarbon date of cal AD 430-620 (95% probability; SUERC-58823) placing activity in the early historic period. The third pit contained a more mixed deposit which was still very charcoal-rich, although more disturbed and stonier in nature.

On the crown of the knoll was a very poorly preserved pit, C12-0015 (Illus 5.33), which had suffered extensively from truncation and burrowing. It was an elongated oval shape in plan, measuring



Illus 5.29 Plan of early historic features. (© Headland Archaeology (UK) Ltd)



Illus 5.30 Section of pits C12-0014, C12-0009, and C12-0011. (© Headland Archaeology (UK) Ltd)



Illus 5.31 View of pits C12-0014, C12-0009, and C12-0011. (© Headland Archaeology (UK) Ltd)

1.3m long, and was filled with large amounts of charcoal and burnt stone, substantial amounts of iron slag, and two further fragments of plano-convex slag cake. The evidence from the mix of metalworking material present indicates that bloom-smithing was taking place; the elongated shape of the pit may represent a heavily truncated metalworking hearth.

At the east of the knoll, sub-triangular pit C12-0006 was filled with a charcoal-rich silt and fire-cracked stone, but there was no evidence of in situ burning. A large pit, C12-0004, cut into the eastern side of the knoll was notably different from those described above. It measured over 4m by 2.5m and was filled with a clay-silt with no evidence of burning or metalworking. Its function is unclear as is its relationship with the metalworking pits.

The gravelly knoll appears to have been a focus of metalworking activity and the group of features on

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Illus 5.32 Section of pit C12-0249. (© Headland Archaeology (UK) Ltd)



Illus 5.33 Section of pit C12-0015. (© Headland Archaeology (UK) Ltd)

the knoll represent rubbish pits containing the waste material from such activities. The finds evidence (see finds synthesis, this chapter) indicates that smithing and possibly welding took place nearby although no in situ evidence of features such as kilns or furnaces was uncovered. Metalworking was part of the everyday activities of an early historic settlement and it is likely such a settlement exists in the vicinity of the gravelly knoll.

5.2.6 Medieval Settlement

The remains of part of a medieval settlement were located to the south of the main focus of the UPS (Illus 5.21) on the northern slopes of the valley. Initially interpreted as part of a platform lying at 310m AOD, they were recognised as later in date when the full extent of the features was revealed. The settlement included the partial remains of a possible cruck-framed building (Structure 1), comprising post-holes and gullies, and two enclosure ditches with features contained within them.

5.2.6.1 Structure 1

Structure 1 comprised an east-west alignment of shallow pits, two of which contained post-pads, which formed the northern wall of a building occupying an area 18m long. This was defined by four gullies and contained a pit with a metalled surface and a stone-filled ditch (Illus 5.34). The southern half of the building appears to have been lost to truncation; to some extent the outline of the building is inferred by the layout of the structural elements rather than wall lines being present.

Six similarly sized shallow pits formed an east-west alignment about 7m long. They measured c 0.5m in diameter and were no more than 0.25m deep. Large flat stones were identified in the fills of two of the pits, C05-1269 and C05-1273 (Illus 5.35); these are interpreted as post-pads providing a base for an upright of some description. It is likely that the other pits in the alignment also contained post-pads rather than posts. Together these post-pads formed the northern edge of the structure. Four stake-holes were also recorded close to the three easternmost pits and they are probably associated with the construction of the uprights. The uprights would have been curved timbers that leaned inwards and combined with similarly shaped timbers opposite to form an A-frame or cruck-frame - a form of construction commonly thought to date to the medieval period. These frames would have been evenly spaced along the axis of the building and the intervals between the six shallow pits identified here may suggest more than one phase of construction.

Three east-west oriented gullies were located parallel to, and immediately to the north of, the post-hole alignment. One of the gullies, C05-0279, curved to the south at its eastern end, and two short sections of gully, C05-1322 and C05-1324, are interpreted as a continuation of this gully to define the western end of the structure. Their width, profile, and shape in plan suggest that they functioned as channels to divert water flowing downhill away from the building. The gullies contained fragments of Scottish medieval redware pottery – probably the remains of no more than two vessels dating from the 13th to the 15th centuries – and charcoal fragments from roundwood which would have been suitable



Illus 5.34 View east of Structure 1 showing gullies, post-holes, and stone filled ditch. ($^{\odot}$ Headland Archaeology (UK) Ltd)



Illus 5.35 View north of stone pad in post-hole C05-1273. (© Headland Archaeology (UK) Ltd)

for construction of fences or wall panels. Another gully to the north of gully C05-0279 is likely to have functioned to drain or capture water as well.

A little over 1m south of the post-hole alignment a stone-filled ditch, C05-0297, was identified

measuring 13.9m long, 1.9m wide, and 0.4m deep. It had a steeply sloping northern side and a more gently sloping southern side, and both eastern and western termini were poorly defined. Its basal fill, C05-1287, was a thin layer (0.2m thick at its maximum) of mid-brownish-grey clayey loam, probably the result of erosion of the surrounding material during the life of the ditch. Above this deposit was a layer of sub-angular stones, C05-1288, moderately large in size (the line of stone can be seen in Illus 5.34). A concentration of stones was also identified in the topsoil north of the western end of the ditch. The stones showed no signs of having been shaped and no discernible pattern was observed in their positioning within the ditch. A radiocarbon date retrieved from charcoal recovered from the primary fill of the ditch provided a date of cal AD 1280-1390 (95% probability; SUERC-58821). While the charcoal may be the result of washed in material, the medieval date is supported by the pottery recovered.

A curvilinear feature, C05-1290, was recorded extending south off ditch C05-0297, measuring

4.5m long by 1.3m wide and 0.25m deep. It had gently sloping sides and a flat base. The basal fill, C05-1293, comprised a layer of small stones concentrated to the west and south-west of the pit, overlaid by a dark brown sandy silt, C05-1289. Within this fill a bolt from a barrel padlock was recovered (see finds synthesis, this chapter). The bolt would have fitted inside a cylindrical lock and may have been used to secure a shackle. It dated to a broad range between the 10th and 15th century AD which is consistent with the other dating evidence from the settlement. Its presence implies that there was something on site important enough to be secured by means of a lock, which is perhaps unexpected given the wider location of the site and the types of structures present. Feature C05-1290 can be interpreted as a wear hollow at the entrance to the building with layer C05-1293 functioning as a metalled surface to reduce the wear.

A number of pits, post-holes, and stake-holes were recorded in relation to Structure 1. Although they are presumed to be associated with the structure, these features do not form obvious arrangements and given the loss of the southern part of the structure their relationship and function was unknown.

5.2.6.2 U-shaped Enclosures

Two similar gullies, C05-0253 and C05-0038, were present to the north and north-east of Structure 1. Each formed an inverted U-shape in plan although the eastern part of gully C05-0038 extended beyond the limit of excavation. It is possible that the gullies fulfilled the dual purpose of defining an area (occupied by the structure) and diverting water and hill-wash from upslope away from that area. No evidence of a bank formed from the upcast of the gullies could be discerned. The gullies intersected each other but no clear stratigraphic relationship could be determined. A number of pits and postholes lay within these enclosed areas.

There was evidence of more than one phase of enclosure. Two short sections of gullies – C05-1241 and C05-1310 (Illus 5.36) – ran parallel to the Enclosure 1 gully and may represent different phases of construction, although the exact relationship was unclear. The Enclosure 2 gully cut through an earlier feature, C05-0269, with a very similar profile, but running on a more north-south alignment; it is likely to belong to an earlier version of Enclosure

2. It should be noted that where Enclosure 2 met the eastern limit of excavation a double U-profile was identified in the base – possibly this provides further evidence of the recut, even if no difference in the fills could be discerned. The fills of the enclosure gullies were fairly homogenous and likely to have resulted from the silting up of the features over time. Fragments of Scottish medieval redware were recovered from gully C05-0253 of Enclosure 1 and date to between the 13th and 15th centuries.

Enclosure 1 defines an area c 17m by 14m. Within this, five post-holes were identified. All were 0.3m in diameter and up to 0.3m deep with straight sides and curved bases. Three post-holes, C05-0283, C05-1276, and C05-1278, formed a north-south alignment, which may suggest their purpose was to mark a division of space.

Within the area defined by Enclosure 2 six pits and a short section of gully, C05-0023, were recorded. Two large shallow pits, C05-0056 and C05-0040, contained fragments of charcoal and a few stray grains of cereal and nutshell. Two of the pits, C05-0074 and C05-0299, contained fills with small amounts of charcoal, burnt bone, and hazelnut shell. This environmental evidence suggests the pits and elongated features may have been associated with food production, although hazelnut shell is commonly associated with prehistoric activity.

5.2.6.3 Medieval Settlement Summary

The excavation revealed a single medieval cruckframed building with the find of a padlock bolt giving a hint of high-status association. Parts of surrounding enclosures and drainage systems were also revealed and the associated pottery finds indicate occupation between the 13th and 15th centuries.

5.2.7 Undated Features

There were numerous features across the valley which could not be securely dated but likely represent a background level of evidence relating to the Neolithic / Bronze Age occupation of the valley.

A more significant, effectively undated, set of features were located on the gravel terrace south of Midlock Water, immediately south of the Iron Age roundhouse. These comprised two parallel long enclosures and a small number of associated pits (Illus 5.37), all of which were heavily truncated.



Illus 5.36 View north of gully C05-1310. (© Headland Archaeology (UK) Ltd)

The northern enclosure, C05-3120, extended for 50m on an east-west alignment and was defined by parallel gullies, set 5m apart (Illus 5.38). The gullies had an extremely shallow profile (Illus 5.39) and in places had been completely lost to ploughing. At the east end both sides curved inwards to terminate either side of an apparent entrance.

The southern enclosure was also defined by two parallel gullies, spaced 6m apart. No clear western terminus could be seen to the enclosure, however to the east it was again defined by clear termini. The southern side of the enclosure gully was fragmentary and it is unclear how far to the west it extended. On the northern side of the southern enclosure, the gully appears to merge into the northern enclosure.

Small amounts of charcoal were found throughout the fills of the enclosures, and a fragment of hazel charcoal was sent for radiocarbon analysis. The date obtained was cal AD 85–245 (95% probability; SUERC-58824), however, it is entirely possible that the material within the fill had washed in at an unknown point. The date matches well with that of the nearby settlement and this may be the source of the dated material.

Within the northern enclosure there were six pits including pit C05-3119 (Illus 5.40), most of which aligned along the long axis of the enclosure. None contained any material to indicate function or directly link them to the enclosure but on the basis of location they are assumed to be contemporary. A single pit within the limits of the southern enclosure is likewise assumed to be associated.

Two parallel grassed-over banks were located south of the northern long enclosure; upon investigation they were discovered to have been formed from stacked turves and are interpreted as a post medieval sheep bucht. A flint blade and a chert flake were recovered from the surface of the bank and are interpreted as residual.



Illus 5.37 Plan of features on gravel terrace south of Midlock Water. (© Headland Archaeology (UK) Ltd)



Illus 5.38 Western end of northern enclosure C05-3120. (© Headland Archaeology (UK) Ltd)



Illus 5.39 Section of northern enclosure gully C05-3120. (© Headland Archaeology (UK) Ltd)



Illus 5.40 Section of pit C05-3119. (© Headland Archaeology (UK) Ltd)

5.2.8 Buried Soil and Possible Agriculture (Illus 5.41)

Across the excavation on the northern side of Midlock Valley there were several places where deep, stratified layers of soils were identified during stripping and these could usually be seen in the trench sections. In some cases, the buried soils can be related to the location of individual platforms. These deposits had survived ploughing and later activity and in some part result in the better preservation of the structures below.

Illus 5.41 shows a west facing section along the eastern edge of the excavation (to ensure an adequate scale the drawing has been split into three parts). The location of the section is shown in Illus 5.4. From left (north/uppermost part) to right (south/ lowermost part) the illustration shows topsoil and subsoils to the east of Platforms 5 and 3, the profile of ditch C05-0020, a profile through Platform 2, and gully C05-0038 of Enclosure 2.

A thin relict subsoil layer, C05-0134, was recorded 6m north of Platform 5. It was visible in section and also as a spread in plan. A series of criss-crossing lines C05-0135 was recorded cutting into this layer (see inset Illus 5.4), the arrangement of these cuts was suggestive of ard marks. It is not known whether these ard marks are of similar date to the activity represented by the platforms, but they are likely to be prehistoric in date. The subsoil layer, C05-0134, was sealed by a layer of dark clayey loam, C05-241, up to 0.2m deep, which was visible in the section for 13m and sealed the fills of ditch C05-0020 at its southern edge. It was interpreted as a buried soil deposit. None of these deposits or features contained datable material, but another buried soil deposit C05-0165 (not illustrated) contained hulled barley grain which is considered characteristic of a later prehistoric date.

The lowermost part of the section drawing illustrates the deposits across Platform 2. Deposits C05-0052, C05-0051, and C05-0243 are interpreted as hillwash - sediments that have travelled downslope to fill the cut, C05-0050, of the platform. Gully C05-0079 appears in profile with a fill, C05-0092, which is sealed by deposit C05-0054. The latter is interpreted as another sediment that has been washed downslope to seal the space occupied by the roundhouse. It also seals the hillwash deposits that filled the cut of the platform, although the exact relationship was difficult to see in section (indicated by the dotted line). The layers C05-0052, C05-0051, and C05-0243 are likely to date to the occupation and immediate postabandonment phase of the platform, while for layer C05-0054 to form as it appears in the section the roundhouse would have had to have ceased to exist.

The nature of the location of the platforms on the slope where movement and mixing of sediments due to both climate and human activity makes the interpretation of these deposits difficult. It can be seen that the movement indicates a dynamic sediment environment.

In contrast the section across Platform 4 did not reveal any evidence of buried soils, indicating a lack of early agricultural activity in this location where the steepness of the slope may have precluded ploughing. It should be noted that traces of ploughing can be seen on LIDAR (National Library of Scotland Maps website 2022) to the north of the Whelphill UPS, indicating that agricultural activity did take place on the equivalent contour to Platform 4.

5.3 Finds synthesis

Julie Franklin

5.3.1 Introduction

The finds from Midlock Valley excavations provided evidence for activity in the Mesolithic, Early Neolithic, Chalcolithic / Early Bronze Age, Middle Bronze Age, Iron Age, early historic, and medieval periods. Most significantly they included the best evidence for a workshop producing cannel coal 'napkin' rings yet found in Britain. The vast majority of the finds, including the cannel coal fragments, came from the excavations on the northern side of the valley. The prehistoric pottery assemblage comprised



Illus 5.41 East facing section through Platforms 5, 3, and 2 (see Illus 5.4 for location of section). (© Headland Archaeology (UK) Ltd)

sherds of pottery representing a minimum of 73 vessels. The medieval pottery assemblage comprised 23 sherds of coarse Scottish redware. Two hundred twenty pieces of chipped stone were recovered which represented small-scale activity and belonged to multiple periods. Other stone finds comprised an axe-head, a quern, a whetstone, and a slate disc. Over 4.4kg of vitrified material was recovered, the majority of which represent debris produced during ironworking, specifically blacksmithing. A medieval iron barrel padlock bolt was also recovered. In contrast, very few artefacts were retrieved from the excavations on the southern side of the valley. The river terrace assemblage comprised sherds from three prehistoric vessels, a quern, and eight pieces of chert while the upslope assemblage comprised sherds from a single prehistoric vessel.

5.3.2 Mesolithic

A Mesolithic component was identified among the lithics, though all the material was residual. Glimpses of Mesolithic land-use in the Clyde Valley were also found in Camps Valley to the north (see Chapter 4), at higher altitudes than expected. 5.3.3 Neolithic

The evidence for Neolithic occupation was concentrated in a few scattered pits which predated Platform 5. The artefactual evidence includes Carinated Bowl pottery, a fragment of polished stone axe-head, and worked pitchstone (Illus 5.42a and b). The Neolithic pottery makes up a substantial percentage of the total pottery assemblage. The type of pottery, the raw material for the stone tools, and a radiocarbon date (3750-3640 cal BC, 95% probability; SUERC-70769) from a fragment of non-oak charcoal retrieved from one of the pits all point towards the Early Neolithic period. This phase of activity includes the most well-travelled raw materials identified in use at the site, with stone from Great Langdale in Cumbria and the Isle of Arran in the Firth of Clyde. Both could have travelled along trade networks and have been found in association with each other at other sites.

At Snabe Quarry, South Lanarkshire (Kilpatrick 2015), and at Kirkton, Dumfriesshire (Maynard 1993), Cumbrian tuff axe-heads, pitchstone artefacts, and Carinated Bowl pottery were also found in association with each other, which seems to denote a kind of 'cultural package'. Radiocarbon dates at both sites are remarkably similar to that recovered from the features that predate Platform 5 (Snabe Quarry: 3715–3630 cal BC, 95% probability; SUERC-50162; 3695–3640 cal BC, 95% probability; SUERC-50161 and Kirkton: 3965–3650 cal BC, Beta-68480; 3960–3385 cal BC, Beta-68481).

The radiocarbon dates imply there was a second Neolithic phase of activity in the earlier part of the Middle Neolithic (between 3640 and 3350 cal BC; 95% probability; SUERC-70772, SUERC-70758, SUERC-70759). However, it is difficult to identify an artefactual assemblage that relates to this period. A Levallois-like lithic piece from Platform 5 would date to this period but was not directly associated with the dates. A sherd identified as possible Beaker might in fact be Middle Neolithic Impressed Ware. Other less diagnostic lithic finds might belong to this period.

The eight residual lithics recovered from features on the southern side of the valley unfortunately tell us very little about who made them or why they were deposited here. At least one of the lithic finds, a denticulate tool, is Neolithic to Early Bronze Age in date. It was found in a medieval or post medieval deposit of stacked turves on the river terrace. The remaining lithics are undatable.

Three sherds of pottery were found in pit C05-3207 located east of the Iron Age roundhouse on the southern side of the valley. While the pottery

itself shares some characteristics with the Neolithic pottery found in the Camps Valley (see Chapter 4), the radiocarbon date from the fill of the pit indicates an association with the Iron Age features making its true relationship unclear.

5.3.4 Chalcolithic / Early Bronze Age

Evidence for Chalcolithic to Early Bronze Age material was relatively scant compared to earlier and later periods, but what was found was concentrated in the group of features shown in Illus 5.7, with other evidence at Platform 3 and Platform 2 (see Illus 5.4). This period is mainly identifiable through residual Beaker sherds and may mark the beginnings of the platform settlement, even if none of the excavated structures can be tied to this period. Two small sub-circular scrapers (so-called 'thumbnail scrapers') may also belong to this period.

On the south slopes of Midlock Valley a large, decorated tripartite pot (probably a Collared Urn) was found in a pit upslope from the river terrace and was associated with a scattering of unidentifiable burnt bone, which may have been a cremation. The radiocarbon dating of the bone to 1880–1695 cal BC (95% probability; SUERC-58829) is in agreement with the typological dating for the pot. The feature was severely truncated and the urn all but destroyed. The location may be significant as it overlooks the unenclosed platform settlement on the opposite slope. While the excavated platforms post-date this pit, it is possible that there may have



Illus 5.42 (a) CAT 77 polished stone axe-head; (b) CAT 374 edge-retouched pitchstone blade. (© Headland Archaeology (UK) Ltd)

been earlier structures within the settlement. The inter-visibility of these two sites, sitting on either side of the slopes, provides a physical separation and a potential contrast between the living and the dead. This possible deliberate placement of the two site types can be contrasted at Green Knowe where two cairns containing inhumation and cremation burials sit adjacent to the site (Jobey 1980).

5.3.5 Bronze Age

The bulk of the artefactual evidence from the north slope of the valley seems to date from the Middle Bronze Age. This includes a large collection of flatrimmed ware pottery and the waste remains from the manufacture of cannel coal rings. Some of the less diagnostic lithics may also date to this period but Middle Bronze Age chipped stone technology is less easily identifiable than that of earlier periods. The whetstone from Platform 3 and the quern from Platform 4 are also most likely to date to this period.

The dating evidence derives from the radiocarbon dates (see Table 5.1) and typological dating of 'napkin' rings elsewhere. Typologically, the pottery can only be broadly dated to the Middle to Late Bronze Age but the use of one vessel (V14; Illus 5.43) was securely dated with a radiocarbon date taken from organic residue on its surface to the Middle Bronze Age, 1495–1300 cal BC (95% probability; SUERC-58818). Flat-rimmed ware elsewhere on the site was associated with charcoal dated to 1605–1425 cal BC (95% probability; SUERC-58822). There is no artefactual evidence for Late Bronze Age activity at the site.

The Middle Bronze Age pottery was represented entirely by flat-rimmed wares. These came in a variety of sizes suggesting they were used for a variety of domestic purposes. Smaller vessels may have been for cooking, larger ones for storage. No doubt there was also a wide range of containers manufactured from organic material such as wood and leather also in use at the time.

The presence of large conjoining portions of the same vessel (V14; Illus 5.43a) within the Platform 3 gully suggests the pot was dumped directly into the base of the gully and fractured in situ (Illus 5.43b). It is possible then that this was a deliberate depositional act. Clearly its location within the

gully afforded it more protection from damage and redeposition than pottery dumped elsewhere. Most of the rest of the pottery assemblage is in the form of small abraded sherds and was probably discarded on midden deposits or occupation surfaces and later redeposited.

There is evidence from Lintshie Gutter, Lanarkshire, that a platform was used to dump midden material after occupation there ceased (Terry 1995: 386, 389). It was possible there to identify individual dumps of pottery representing discrete episodes. It was speculated that the midden was not accumulating directly adjacent to occupation but was deliberately deposited on a different platform some distance away. Given that any midden deposit would have involved food waste, animal waste, and probably sewage, this would have had the practical effect of removing such malodorous material from the immediate occupation environment. The platform cut, gullies, and apron would have prevented the midden material washing downslope. It is possible that Platform 3 - which contained the largest pottery assemblage - was used in similar fashion and that the large accumulation of pottery there was largely occupation debris from other platforms.

A pit located on the river terrace south of Midlock Water provides artefactual evidence for Middle Bronze Age activity on the opposite side of the river to the platform settlement. The pit contained portions of a single vessel of flat-rimmed ware crushed beneath a large saddle quern. Charcoal from the pit was dated to 1610–1430 cal BC (95% probability; SUERC-58831). The very large quern is unlikely to have travelled far from where it was used. However, the only known Middle Bronze Age occupation in the vicinity is the platform settlement on the opposite side of the valley and while it seems reasonable to suggest this as its provenance it would have had to have been carried across the river to be deposited in the pit. The deposition of both pot and quern would seem to relate to a single event of structured deposition. Powerful symbolism may have surrounded querns in terms of their transformative power and their ritual deposition has been noted elsewhere (Engl 2008; McLaren 2021: 133).



Illus 5.43 (a) V14 Middle Bronze Age bucket shaped vessel with internally bevelled rim; (b) V14 in process of being excavated. ($^{\odot}$ Headland Archaeology (UK) Ltd)

5.3.6 Cannel Coal Assemblage Fraser Hunter

The evidence of the cannel coal workshop on Platform 4 is the most remarkable of the finds assemblages recovered from the whole project. The excavations recovered parts of two finished items and, more importantly, nine objects representing a series of stages in the working of this black organicrich stone (cannel coal) into so-called 'napkin rings' – fasteners with flared ends and a concave outer edge, typically with one end slightly less flared than the other. Careful sorting of samples recovered an important assemblage of working debris (Table 5.2) confirming that on-site working of the material was overwhelmingly concentrated on Platform 4. One roughout and one piece of working debris suggest much more limited craft activity (perhaps finishing work) on Platform 5, while the only fragment of a completed ring came from Platform 2, indicating at least some of the products were used on the site.

5.3.6.1 The Assemblage

Physical characteristics indicate the material is cannel coal, notably its dark colour and conchoidal fracturing, though it also shows some lamination. The material is visually very consistent, suggesting a single source. That source is not immediately local; the nearest recorded cannel coals come from the Douglas coalfield some 15km west-north-west of Midlock Valley and around Lesmahagow 25km to the north-west (Gibson & Flett 1922: 12, 17), although specific outcrops have not been prospected for.

Table 5.2 Summ	ary of working of	lebris and techno	ologies present from	Midlock Valley by context
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Context	Structure	u	m (g)	Type 1/2/3/?	Flake	Cut	Abrade	Split	Gouge	Corner Removal	Edge Trim	Thin	Undiagnostic	Bifacial?
C1011	P4	1	0.02	0/0/1/0	1						1			
C1030	P4	2	0.44	0/0/2/0	1					1			1	
C1031	P4	3	0.1	0/0/3/0	3	1					1		2	
C1032	P4	61	3.81	2/12/47/0	55	13	14	15		2	28	27	4	16
C1034	P4	37	0.97	4/10/23/0	24	3	4	8			14	20	3	10
C1038	P4	2	0.08	0/0/2/0	2					1	1			
C1040	P4	2	0.12	0/0/1/1	1						1		1	
C1042	P4	1	0.36	0/0/1/0	1							1		
C1044	P4	12	0.15	0/0/8/4	8			1	1	1	1	5	5	
C1055	P4	9	0.43	0/3/6/0	9	1	1			2	2	4	1	
C1059	P4	5	0.23	1/4/0/0	5		1			2	1	2		
C1064	P4	10	0.93	0/3/6/1	10	3	2			1	5	3	1	
C1066	P4	9	0.09	1/1/7/0	9		_				3	3	3	1
C1097	P5	1	1.02	0/0/1/0	1			1		1				
C1183	P3	1	0.22	0/0/1/0	1							1		
C1279	Medieval Structure	1	0.35	0/0/0/1									1	
Totals		157	9.32	8/33/109/7	131	21	22	25	1	11	58	66	22	27

The unfinished items were abandoned because of laminations in the material leading to fracture or, in one case, breakage of the flange. Their great value is to allow the manufacturing process to be reconstructed in some detail. The chaîne opératoire can be expressed as a series of steps detailed below.

- 1. Preparation of a roughout, circular in plan and tapered in profile, by splitting, cutting, and flaking (Illus 5.44).
- 2. Incising circles to mark out the perforation (seen on one face of CAT 509).
- 3. Hollowing out a basin-shaped depression in the narrower face of the roughout. This removed around two-thirds of the thickness of the block, leaving only a small amount to perforate from the opposing side later in the process. The hollow was gouged and then abraded (Illus 5.45a, b).
- 4. Rough undercutting of the outer edge (by cutting and flaking) to begin to form the concavity.
- 5. Completion of the perforation.
- 6. Abrasions to final form of concavity and perforation (Illus 5.46) undertaken simultaneously.
- 7. Final polishing (Illus 5.47).

Fragments of working debris were also recovered that were dominated by flakes from the later stages in the process. They included edge-trimming flakes (Illus 5.48a, b, c), some of which had bifacial trimming (Illus 5.48d, e, f, g, h, i, j, k, l) indicating they came from trimming areas that had been worked from both sides. Other debris such as thinning flakes and edge / corner removal flakes were also recovered (Illus 5.48m, n, o, p).

It is difficult to reconstruct the implements used to work the material, but the angle and sharpness of some of the cuts suggests a metal blade, while some of the marks in the hollows suggest a fine gouge; experimental work would be valuable to confirm this but lies outside the scope of the current project.

The 157 fragments of working debris (weighing only 9.32g) were catalogued according to the system developed by the writer for studying the assemblage from Braehead, Renfrewshire (Hunter 2007b). Wider discussion suffers from a lack of comparative material, as this is only the second significant assemblage (after Braehead) where the use of sieving gives one confidence that a representative range of flakes was recovered. Detailed comparison is thus difficult; this study has tabulated the evidence (Table 5.2) and characterised certain key elements of it.



Illus 5.44 CAT 502 unperforated blank for a fastener. (© Headland Archaeology (UK) Ltd)

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Illus 5.45 (a) CAT 503 part-perforated fastener roughout; (b) CAT 504 part-perforated fastener roughout; (c) CAT 506 spall from roughout. (© Headland Archaeology (UK) Ltd)

The small size of the fragments of working debris – an average of 8.2 ± 3.0 mm in length $(0.06\pm0.11g)$ – is noteworthy and contrasts with the material recovered from Braehead (Illus 5.49). However, Braehead was focussed on primary preparation of roughouts whereas at Midlock Valley it seems all stages took place. In the latter there is a dominance of small tertiary flakes from later stages in the process (68% by fragment count), many with pre-existing flake scars running in opposed directions, which indicate they came from trimming areas that had been worked from both sides, probably from the outer edges. A significant number of edge-thinning flakes were removed at an angle to create an undercut, a feature which may well prove to be distinctive of these fasteners as they require such hollowing of the outer edge. The final stages of creating the concave edge were done by abrasion, as seen on the roughouts.



Illus 5.46 CAT 509 unfinished fastener roughout. (© Headland Archaeology (UK) Ltd)



Illus 5.47 CAT 25 fragment of finished fastener. (© Headland Archaeology (UK) Ltd)

Evidence of such fasteners was reviewed by the writer in 1998, when 48 examples were known from 19 sites (Hunter 1998). Today the tally stands at 97 examples from 30 sites, so they merit reappraisal. This increase comes both from new excavations and further work in museum collections and older publications. Broad conclusions from the earlier work stand, but thanks to the Midlock Valley excavations we can add more detail of production processes, while more can now be said of chronology and distribution. Table 5.3 summarises the data by former county, as this allows it to be broken down further than more recent regions for several key areas.

5.3.6.2 Distribution and Date

The updated distribution (Table 5.3; Illus 5.50) confirms this was a distinctive regional type, with a fairly even spread from the Humber to the Forth when considered by numbers of findspots rather than absolute numbers of finds - the latter are biased by large numbers from sand dune sites. It is notable that there is quite a concentration in Lanarkshire. Earlier debates centred on whether the material was Bronze Age or early medieval in date, but chronological evidence has become clearer in recent years. The earliest evidence for their use is Early Bronze Age, from burial associations. Not all are clear-cut or well-dated, but the association from Yarrow with Early Bronze Age pottery is convincing. Most of the evidence is Middle Bronze Age in date, but their use ran at least to c 1000 BC based on the evidence from Green Knowe (Jobey 1980: 93) and perhaps Kidlandlee (R Pope, pers comm). The most unexpected dating is the example from the early medieval hoard of Talnotrie (Maxwell 1913: 13), which must be an antique that was rediscovered and reused.

The number from recent settlement excavations is noteworthy, and suggests they were a common ornament at the time. This is supported by the considerable numbers from sand dune sites (where such material is more readily visible), with nine from Shewalton Moor and over 30 from Luce Sands (Table 5.4).





Illus 5.48 Worked cannel coal debris: (a–c) edge-trimming; (d–l) bifacial edge-trimming; (m) corner removal; (n) trimming; (o) thinning, edge perforated; (p) edge removal to make overhang. (© Headland Archaeology (UK) Ltd)



Illus 5.49 Chart showing ratio of size of cannel coal debris found at Braehead versus Midlock Valley. (© Headland Archaeology (UK) Ltd)

5.3.6.3 Manufacture

Unfinished examples provide the best guide to manufacture, with examples from Ayrshire, Clackmannanshire, Fife, Lanarkshire (two locations - Camps Reservoir as well as Midlock Valley, indicating Midlock was not the only local production site), Northumberland, and Wigtownshire, while the existence of examples in jet (Elgee 1930) indicates production in Yorkshire as well. Visually, none of the other Scottish material seen first-hand is jet; most appear to be cannel coal or similar materials which are found widely in central and western Scotland, though rarely in the Borders or Galloway (Gibson & Flett 1922). Given this, it is notable that there is no manufacturing evidence in the Borders and almost none in Galloway, either in the extensive antiquarian finds or in recent finds from research or development-led excavations, with only one (perhaps two) examples in the assemblage of 34 items from Luce Sands. This rarity in datasets from different origins makes the absence more reliable. It suggests Luce Sands was

Area	No of Objects	No of Sites	Settlement	Burial	Older Site	Stray	Other	Unfinished (Nos/Sites)	Perforated side	Unperforated
Ayrshire	13	2				2		5/1	1	
Clackmannanshire	1	1	1					1/1		
Co Durham	2	2				2				
Dumfriesshire	1	1	1							
E Yorkshire	4	3	2		1					1
Fife	5	1				1		1/1	1	1
Kirkcudbrightshire	1	1					early	medieval	hoard	
Lanarkshire	12	5	2	1	1	1		7/2	3	6
N Yorkshire	2	1		1					2	
Northumberland	5	3	1	1		1		1/1		1
Peeblesshire	1	1	1							
Perthshire	1	1	1							
Roxburghshire	1	1				1				
Selkirkshire	1	1		1					1	
W Lothian	1	1				1				1
Wigtownshire	43	2				2		2/1	7	
unprovenanced	3	3				3			1	1
Totals	97	30	9	4	2	14	1	17/7	16	11

Table 5.3 Summary of napkin ring evidence by former county

an area of consumption (and perhaps distribution) rather than manufacture. A striking sidelight on this is the evidence of perforations: whereas the normal perforation pattern was through the wall, of the seven Wigtownshire examples six are perforated vertically or at an angle through the flange. This is otherwise unknown, suggesting it represents repair or functional modification rather than being a primary feature as wall perforations seem to be.

The chaîne opératoire outlined above for Midlock Valley is confirmed by other examples with only minor additions and variations. Most unfinished examples are perforated and close to completion, but a few examples from earlier in the process provide more clues. Two other part-perforated examples are known: one from Tentsmuir is closely similar to the Midlock Valley ones, while the Hepburn Moor example was hollowed from the broad rather than the narrow side. On the Fall Kneesend ring, finishing of the perforation was more advanced than the exterior, suggesting the former was prioritised because finishing of it was more likely to cause fracture. The rather thin roughout from Upper Forth Crossing has the two perforations marked out (to different sizes, indicating an intention to flare the ends differentially) but no work on the exterior channel.

5.3.6.4 Characteristics and Function

The outline characteristics of the fasteners have been detailed above and are summarised in Table 5.3. Illus 5.51 gives the range of dimensions known for outer diameters, perforations, and heights (where these can be accurately recorded), while Illus 5.52 gives



Illus 5.50 Distribution map of cannel coal finds. (© Headland Archaeology (UK) Ltd)

the ratio between the diameters of the two ends to show the varying degree of flare (typically 80–90%). Dimensional data shows quite some variety, with most external diameters falling into the range 30–70 mm. Some are larger still although the largest are scaled from publication illustrations (see reference column in Table 5.4) that lack a scale bar, with no dimensions in the catalogue, and there is a lingering concern that the published reproduction ratio was wrong. It is notable that the concave surface of the fasteners is not polished, indicating it was not visible in use; this and the expanded ends indicate it was set into something and retained by the flanged ends. Additional fixing was provided in some instances by perforations through the wall; evidence from unfinished examples indicates they were a primary feature, for example Fall Kneesend (Hunter 2001). On some intact examples they are very regular, with four set at right angles through the wall, for example Yarrow (Smith 1857: 484) and Lockton Pastures (Elgee 1930: 112). Sixteen examples show such perforations, widely spread across the distribution, but this gives an inaccurate measure of their overall frequency as an apparently unperforated fragment could have been perforated in a lost portion. If we look only at the twelve examples sufficiently intact to preserve perforations, four have perforations and eight lack them. The presence of such perforations

	ence/museum	ow NN2191	ow NN2196	tshire KIMMG 1 306 (SM352)	rshire KIMMG 298 (SM344)	sshire KIMMG .324 (SM370)	rshire KIMMG 325 (SM371)	rshire KIMMG . 335 (SM381)	rshire KIMMG 321 (SM367)	rshire KIMMG 287 (SM333)	rshire KIMMG . 307 (SM353)	rshire KIMMG 321 (SM367)	nder 1933, 30; BMC 331
	Refer	Glasg	Glasg	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	E Ayı AR/A	Calla: NMS
	date												
	condition	frag	frag	firag	frag	frag	frag	frag	frag	frag	frag	frag	frag
	context	۰.	۸.	stray	stray	stray	stray	stray	stray	stray	stray	stray	stray
	detail	3 frags of lip, 2 joining		lip frag from flared side; abrasion on both faces suggests unfinished	flange frag; toolmarks inside and out	probable roughout, given residual knife cuts	roughout, perforated	wall frag	broad, flat flange	lip frag, narrow face	lip frag, narrow face	broad, flat flange	
	unfinished?			۸.	۰.	ý	у						
	other perf	lip											wall
	Η						13						15.5
agment	min perf D						20-25	25-30	25-30	30-35			30-35
imum; frag fra	D upper/ lower												60/55
ation; min min	county	۰.	۸.	Ayr	Ayr	Ayr	Ayr	Ayr	Ayr	Ayr	Ayr	Ayr	Ayr
perf perfora	site	W Scotland	W Scotland	Shewalton Moor	Shewalton Moor	Shewalton Moor	Shewalton Moor	Shewalton Moor	Shewalton Moor	Shewalton Moor	Shewalton Moor	Shewalton Moor	Stevenson Sands

Table 5.4 Characteristics of napkin rings known to the writer. Dimensions in mm; *indicates incomplete dimension. D diameter; H height;

/museum	: 1933, 30; 1C 333	[171	: 1933, 30; 1C 332	2018	998	m L ones	et al 1983, 8	980a, 43,	996, 65, fig	980b, 324,
Reference	Callandeı NMS BN	NMS FN	Callander NMS BN	Sheridan	Hunter 1	Pers com Allason-Jo	Coggins (16, fig 8.	Manby 1 fig 12.14	Manby 1 26.4;	Manby 1 342 no 9
date				MBA	MBA					
condition	frag	frag	frag	frag	frag	frag	frag	frag	frag	frag
context	stray	stray	stray	settlement	settlement	۰.	stray	ditch around Neo barrow	pit in undated roundhouse	settlement
letail				oughout, berforated but tot expanded. Different rrocess; herforations narked out, ut no edge hannelling. Zanneloid shale	annel coal		ody frag	et?		ip only dimensions caled from
unfinished? d	x				5			Ĺ		
other perf								и		
Η				12.5				17		
min nerf D	25-30	20–25	25–30		19	10–15	20	14		
D upper/	45	40	55	51	50			40/38	57	06
county	Ayr	Ayr	Ayr	Clacks	Dumfries	Durham	Durham	E Yorks	E Yorks	E Yorks
site	Stevenson Sands	Stevenson Sands	Stevenson Sands	Meadowend Farm	Blairhall Burn	Butterwick	Simy Folds	Boynton, High Easton barrow	Caythorpe, Rudston	Rudston Wold

Table 5.4 cont

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Table 5.4 <i>co</i>	<i>1t</i>										
site	county	D upper/ lower	min perf D	Н	other perf	unfinished?	detail	context	condition	date	Reference/museum
Rudston Wold	E Yorks	90					lip only (dimensions scaled from drawing)	settlement	frag		Manby 1980b, 324, 342 no 10
Cast, Leuchars	Fife							stray	frag		NMS BN 556
Morton Loch, Tentsmuir	Fife				wall			stray	frag		Fife 1977.638
Tentsmuir	Fife	55		20	L L	y	roughout, part-perforated		complete		Dundee 1971.195.15
Wards, Earlshall	Fife							stray	frag		NMS BN 538
~.	Fife?							stray	frag		Fife 1984.546
Talnotrie	Kirkcudbright	52	15–20				reworked	hoard	reworked	Early Medieval	Maxwell 1913, 16; NMS FC 225
۸.	Lanark	28.5	16.5		wall, 2 opposed			stray	frag		0 NAS FN 9
Camps Reservoir	Lanark	56/48	31	21	и			burial	complete	EBA?	Hunter & Ward 2021
Camps Reservoir	Lanark	57/49	31	22.5	ц			burial	complete	EBA?	Hunter & Ward 2021
Midlock Valley	Lanark	65/56		21	ч	У	roughout, part-perforated; cannel	settlement	near- complete	MBA	this paper sf.503
Midlock Valley	Lanark	61/54	25	20.5	ч	у	perforated roughout; cannel	settlement	near- complete	MBA	this paper sf.509

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Table 5.4 <i>coi</i>	ut										
site	county	D upper/ lower	min perf D	Н	other perf	unfinished?	detail	context	condition	date	Reference/museum
Midlock Valley	Lanark	56/52.5		20	ц	У	roughout, part-perforated; cannel	settlement	near- complete	MBA	this paper sf.504
Midlock Valley	Lanark			37	а	×	roughout, ?unperforated; broken; cannel	settlement	near- complete	MBA	this paper sf.500
Midlock Valley	Lanark			30		X	roughout, unperforated; cannel	settlement	near- complete	MBA	this paper sf.502
Midlock Valley	Lanark	?/40				У	roughout, part-perforated; cannel	settlement	near- complete	MBA	this paper sf.505
Midlock Valley	Lanark	40	25				could be upper or lower flange; cannel	settlement	frag	MBA	this paper sf.25
Fall Kneesend	Lanark		24		wall	У	roughout, perforated; cannel	cairn	frag	?EBA	Hunter 2001
Upper Waterhead, Lesmahagow	Lanark	45/45	13	c.10	wall		given in Pettigrew 1864 as Auchlochan, Lesmahagow	۰.	near- complete		Pettigrew 1864, 344; Evans 1897, 456; Hunterian GLAHM:B.1914.469
Lockton Pastures	N Yorks	44.5/38	25.5	12	wall, 4		jet	burial	complete	EBA?	Elgee 1930, 112; Yorkshire Museum 28.2.48
Lockton Pastures	N Yorks	?/36.5	20.5		wall, 2 (originally 4?)		jet	burial	near- complete	EBA?	Elgee 1930, 112; Yorkshire Museum; 28.1.48
Alnham	Northumberland						flange	burial (disturbed)	frag		Jobey 1966, 41–2, fig 15

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site	county	D upper/ lower	min perf D	Η	other perf	unfinished?	detail	context	condition	date	Reference/museum
Hepburn Moor	Northumberland	47/30		21	ц	ý	roughout, part-perforated; hollowed from broad side; concavity started	stray	frag		Newbigin 1941, 109
Hepburn Moor	Northumberland	52/40	14	29				stray	frag		Jobey & Weyman 1981, 40, fig 8.16
Hepburn Moor	Northumberland	с.85					flange	stray	frag		Newbigin 1941, 109
Kidlandlee	Northumberland	65–70	30–35					settlement	frag	BA	Pers comm R Pope / P Carne
Green Knowe	Peebles			20				settlement	frag	MBA/ LBA	Jobey 1980, 93, fig 12.3
Blackford	Perth	50	18				about a third of a ring; lower face lost; cannel	settlement	frag	MBA	Hunter 2020
Fairnington	Roxburgh	45-50	25-30				frag with one face and about half of profile	stray	frag		NMS FN 201
unprov	Scotland	53	25-30					stray	frag		NMS EQ 99
Yarrow	Selkirk	46/40	22		wall, 4			burial	complete	EBA burial	Smith 1857, 484; Callander 1916, 220; NMS EQ 92
West Mains, West Calder	West Lothian	36/33	19		а		traces of reworking; probably finished, though perforation not polished	stray	near- complete		Smith 1872, 538; NMS FN 8
۸.	Wigtown	45–50			lip		lip only	۰.	frag		Stranraer 1945.151

Table 5.4 cont

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Table 5.4 <i>con</i>	ıt										
site	county	D upper/ lower	min perf D	Н	other perf	unfinished?	detail	context	condition	date	Reference/museum
۸.	Wigtown		20				body frag, lips broken off	۰.	frag		Stranraer 1945.19
۰.	Wigtown	55-60					lip only	۰.	frag		Stranraer unreg
۸.	Wigtown	65-70					lip only	۰.	frag		Stranraer unreg
۸.	Wigtown						body frag	۰.	frag		Stranraer unreg
~.	Wigtown							۸.	frag		Stranraer 1945.205
۸.	Wigtown						frag	۸.	frag		Stranraer 1945.24
۸.	Wigtown						wall frag	stray	frag		Stranraer 1988.882
Kilfeddar	Wigtown	44	21				much of one face missing	stray	near- complete		Callander 1916, 220; NMS FN 142
Luce Sands	Wigtown	70/50	25-30	15.5	angle		reworked after breakage, dimensions uncertain	stray	frag		NMS unreg
Luce Sands	Wigtown	60/50	20-25	15				stray	frag		NMS unreg
Luce Sands	Wigtown	75	20–25		?4 vertical	y	one perforation unfinished	stray	frag		NMS unreg
Luce Sands	Wigtown				incomplete	y?	flange frag	stray	frag		NMS unreg
Luce Sands	Wigtown	c.40			wall			stray	frag		Dumfries unreg
Luce Sands	Wigtown				vertical			stray	frag		NMS unreg
Luce Sands	Wigtown	70?	30-35?		wall, flange			stray	frag		NMS unreg
Luce Sands	Wigtown		50-55	6*			upper flange	stray	frag		NMS BH 9208
Luce Sands	Wigtown	60	20–25	14				stray	frag		NMS unreg
Luce Sands	Wigtown	60	25–30					stray	frag		NMS unreg
Luce Sands	Wigtown	c.70						stray	frag		Dumfries unreg
Luce Sands	Wigtown						flange frag	stray	frag		NMS unreg
Luce Sands	Wigtown						flange frag	stray	frag		NMS unreg
Luce Sands	Wigtown						flange frag, poss reworked	stray	frag		NMS unreg

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site	county	D upper/ lower	min perf D	Н	other perf	unfinished?	detail	context	condition date	Reference/museum
Luce Sands	Wigtown						flange frag	stray	frag	NMS unreg
Luce Sands	Wigtown	65-70	55-60	11.5*			?lower flange; split	stray	frag	NMS BH 8316
Luce Sands	Wigtown		25-30	4*			faces lost; probably unfinished, as perforation rather rough	stray	frag	NMS BH 8313
Luce Sands	Wigtown		35-40	4.5*			fragment of central section	stray	frag	NMS BH 8403
Luce Sands	Wigtown	50-55	25	6*			upper flange	stray	frag	NMS BH 8314
Luce Sands	Wigtown		20–25	6*			central section	stray	frag	NMS BH 8402
Luce Sands	Wigtown		35-40	6*	wall		badly damaged	stray	frag	NMS BH 8320
Luce Sands	Wigtown	30-35	20-25	6.5*			lower flange	stray	frag	NMS BH 8399
Luce Sands	Wigtown		25–30	6.5*			central section	stray	frag	NMS BH 8401
Luce Sands	Wigtown	55-60		7*			lower flange	stray	frag	NMS BH 8319
Luce Sands	Wigtown	35-40		7.5*			upper flange	stray	frag	NMS BH 8400
Luce Sands	Wigtown	40-45		8*			lower flange	stray	frag	NMS BH 8315
Luce Sands	Wigtown	55-60		9*			upper flange	stray	frag	NMS BH 8317
Luce Sands	Wigtown		25–30	9.5*	wall		central section	stray	frag	NMS BH 8404
Luce Sands	Wigtown	45–50		9.5*			Rower flange	stray	frag	NMS 8318
Luce Sands?	Wigtown	30-35		15.5				stray	frag	Stranraer 1954.101
Luce Sands?	Wigtown	45-50	25–30					stray	frag	1988.883 (202A)
Luce Sands?	Wigtown	50-55	25–30					stray	frag	1988.883 (205A)
Luce Sands?	Wigtown	40-45					lip only	stray	frag	Stranraer 2011.29
Luce Sands?	Wigtown	55-60					lip only	stray	frag	Stranraer 2011.29

Table 5.4 cont

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Illus 5.51 Chart showing range of dimensions known for outer diameters, perforations, and heights of fasteners. (© Headland Archaeology (UK) Ltd)



Illus 5.52 Chart showing ratio of flanged end diameters. (© Headland Archaeology (UK) Ltd)
supports the idea that they were stitched into something and argues against such rings being used in piercings as has been suggested for flanged Bronze Age gold ornaments (Cahill 2001). There are grounds to argue certain kinds of perforations are secondary, as discussed above.

Use as fasteners in clothing is suggested by their presence in burials. Pairs are known from nearby Camps Reservoir (where they lay in what was probably the neck area) and Lockton Pastures, suggesting use as eyelets for something like a cloak or other garment. However, only a single one comes from the Yarrow burial; the other may have been lost on antiquarian recovery, or the mode of uses varied.

5.3.6.5 Catalogue

Roughouts: unperforated

► CAT 500. (Not illustrated)

Roughout. Three fragments, probably from one block as they are very similar in character, but not joining. From a thick block, the broad upper surface split and heavily damaged, the lower only preserved in one corner but also split. Edges shaped to crude circle by flaking and cutting, tapering to narrow face though mostly lost in damage. A cutmark at the point where the block splits indicates it was deliberately split in two after this area had broken off (the latter being the probable cause of abandonment). Largest fragment dimensions L: 64mm, W: 33mm, Th: 37mm, M: 47.97g

► CAT 502. (Illus 5.44)

Unperforated blank for a fastener. Sub-oval thick block, faces split with some subsequent flaking and cutting on the narrower one to shape it. Edges roughly flaked to give a tapered profile, with initial heavy flaking followed by some finer flaking and cutting. Probably abandoned because part of one side sheared off, giving it an oval rather than a circular form. Black, slightly granular, conchoidal fracture, occasional laminar fracture; cannel coal or canneloid shale. Dimensions L: 70mm, W: 58mm, Th: 30mm, M: 88.20g

Roughouts: part-perforated

CAT 503. (Illus 5.45a)

Part-perforated fastener roughout. Narrow face split, broad one slightly concave from cutting and crude

abrasion. Central basin-shaped hollow (suggesting use of a chisel or gouge), leaving about 7mm of thickness to create perforation. Outer edge cut and occasionally flaked to shape, with the start of an undercut to define the flange over a third of the circumference. Slight taper in thickness suggests it was abandoned because part of the lower surface sheared off. Dark material, laminations with some crosscracking, conchoidal fracture; cannel coal. Dimensions upper L: 66mm, W: 65mm; lower L: 58mm, W: 56mm; perf (max): 27–28mm; Th: 21mm, M: 51.11g

► CAT 504. (Illus 5.45b)

Part-perforated fastener roughout. Lower face split, probably in accidental breakage as it is angled to the upper surface; the latter is abraded flat with a large central basin-shaped hollow, the irregular marks from initial chisel or gouge hollowing mostly coarsely abraded. Outer edge cut and flaked to shape in broad cuts, then undercut to form flange. Dimensions upper L: 61mm, W: 56mm; lower L: 55mm, W: 52.5mm; perf: 35mm x 37mm x 11mm; Th: 20mm, M: 37.98g

► CAT 506. (Illus 5.45c)

Spall from roughout, preserving one face, probably the narrower one; split to shape it; outer edge cut to curve; perforation in progress with shallow scooped cuts, perhaps from a gouge. Dimensions Diameter c 40mm (40% survives), L: 34mm, W: 20mm, Th: 16.5mm, M: 1.88g

Roughout: perforated

► CAT 509. (Illus 5.46)

Unfinished fastener roughout, discarded due to breakage of part of upper flange. Naturally flat surfaces from a tabular or split block, with some abrasion to smooth them. The narrower face shows traces of a marking-out line surviving around the edges of the perforation. Hour-glass perforation, cut and then abraded; finishing still in process as it is quite angular. Outer edge shows some cutting (perhaps to create the flange) but most traces are of abrasion. The hollow ran most of the way round the outside; one area had not yet been begun. Dark grey material with conchoidal fracture and some laminar splitting; cannel coal. Dimensions upper L: 64mm, W: 61mm; lower L: 57.5mm, W: 53.5mm; perf: 25–27.5mm, Th: 20.5mm, W: 22mm; M: 35.79g

Finished Artefacts

► CAT 25. (Illus 5.47)

Finished fastener fragment, irregularly circular in plan as it survives, narrow lower face lost, flared upper surface and flange edge well-finished; concave outer edge duller, with extensive abrasion scars. Hourglass perforation shows residual cutmarks overlain with abrasion in the lower portion and entirely removed by circumferential abrasion in the upper. Dark material with conchoidal fracture – cannel coal. Internal diameter c 25mm, external diameter c 40mm, L: 28mm, W: 11mm, Th: 9mm, M: 1.75g

► CAT no 505. (Not illustrated)

Fragment from polished outer edge of a bangle or fastener, the diameter perhaps leaning toward the former as it is at the upper end of the fastener spectrum. External diameter 70–75mm (8% survives), L:18.5mm, W:7.5mm, Th:2.5mm, M: 0.18g

Miscellaneous

► CAT 501. (Not illustrated)

Broken-up tabular block, one face split, the other and three edges flaked, one naturally flat; naturally broken, no working evidence. L: 65mm, W: 28.5mm, Th: 14.5mm, M: 18.12g

► CAT 507. (Not illustrated)

Fragment from corner of roughout, faces split, sides flaked. L: 33mm, W: 20mm, Th: 12mm, M: 4.59g

► CAT 508. (Not illustrated)

Undiagnostic broken chunk. L: 37mm, W: 10mm, Th: 8mm, M: 1.23g

5.3.7 Early Historic

The only finds recovered from the metalworking site were in the form of 4.4kg of metalworking waste. These were found in several different pits associated with charcoal and included planoconvex slag cakes and hammerscale. Also present was vitrified material which was suggestive of ironworking. The plano-convex slag cakes can form during either smelting, at the base of a furnace, or smithing, at the base of the hearth, and determining which is not always possible (McLaren 2015). The quantity and size of the hammerscale flakes and spheres indicates bloom smithing or welding on top of more elementary blacksmithing (ibid: 7-8). The lack of structures associated with the pits indicates that they functioned to contain the waste material from blacksmithing, but it is likely there were hearths nearby and small-scale blacksmithing was taking place at the site. Ironworking has been identified at other sites in South Lanarkshire including similar blacksmithing evidence at Dolphinton (Heald 2002), with slightly earlier ironworking dating to the Roman Iron Age being found at Hyndford Crannog (Munro 1899: 383), Crawford (Maxwell 1972: 177), and at Woodend (Chapter 3). Evidence of metalworking in the early historic period in Scotland is found at a variety of sites including nuclear forts, some monastic sites, crannogs, and open settlements (Heald & McLaren 2008: 206). At the time, iron objects were in common use and their maintenance and repair was part of the everyday work of the community (ibid). The evidence of the pits in Midlock Valley suggests the presence of an early historic settlement nearby.

5.3.8 Medieval

Despite the unexpected discovery of the medieval remains at this location, the paucity of the finds assemblage from this site is not unusual at a Scottish medieval rural site. It is likely that the material culture was largely of organic materials and much would have been reused, recycled, or burnt as fuel. Any remaining midden material was probably turned into the fields as manure.

The remains of two pottery jugs and an iron padlock were recovered from a series of ditches, in particular gully C05-0279 and wear hollow C05-1290. The jugs (23 sherds, 389g) were both fragmentary and incomplete, and of local redwares, typical of medieval pottery in the area from the 13th to 15th centuries (Haggarty et al 2011). The most complete vessel was represented by several sherds of handle base and body.

The padlock bolt (Illus 5.53) has a round flat head with two spring spines orientated in perpendicular planes. There is also a small shallow loop fixed to the plate through which a wire loop or string might have been passed to aid in manipulating the bolt. The bolt would have fitted inside a cylindrical lock and be held in place by the springs of the



Illus 5.53 Barrel padlock. (© Headland Archaeology (UK) Ltd)

spring spines. It would only have been possible to remove the bolt by inserting a key in a hole at the opposing end of the lock, compressing the springs, and allowing the bolt to be slid out. It is an anachronism in this context, particularly given the complete lack otherwise of any kind of metalwork of medieval date. A padlock, as a complex and precision piece of ironmongery, would have been of some value and implies that there was something at the site worth securing, presumably brought there for some purpose. Its loss and deposition in the ditch probably represent a singular event rather than casual refuse disposal. The fact that it seems to have been part of a shackle conjures up a number of interesting scenarios, particularly given the history of warfare in this area during the later 13th and early 14th centuries. It might be imagined that the bolt was lost in an escape attempt or a failed arrest.

5.4 Environmental synthesis

Angela Walker & Laura Bailey

Charcoal and charred plant remains were recovered from a variety of deposits dating from the Neolithic to the medieval period at Midlock valley. Analysis of the in situ hearth deposits and structural remains associated with the Bronze Age platform settlement provided a rare insight into the types of wood used in these features.

Charcoal analysis, together with the interpretation of vegetation information from the Late Bronze Age onwards taken from a pollen core at Camps Valley (Chapter 4) to the north (see Section 2.5.2 for summary), allowed tentative observations to be made on possible specific wood species selection and temporal change in species presence. Quantitative interpretation of wood usage through time is difficult due to a variety of factors including the varying sample sizes for each site and period and the differing sources and provenance of material. The origin of some of the charcoal, such as the structural remains from the platform settlement and hearths, is more certain than that of others, such as the Neolithic pits or the fills of drainage gullies.

5.4.1 Early to Middle Neolithic

Features dating from the Early to Middle Neolithic period, including an isolated pit, C05-0183, located on the upper northern slope of the valley, were found to include hazel charcoal and hazelnut shell (Timpany et al 2012; Bailey 2015; Walker 2016) like many of the Neolithic pits located in Camps Valley (see Chapter 4), thus highlighting the importance of hazel in the Neolithic economy. A small amount of alder, maloideae, blackthorn, and oak charcoal were also identified in the pit assemblage. Similarly, a small group of pits, which predated Platform 5, produced assemblages of predominantly hazel with occasional maloideae charcoal.

5.4.2 Late Neolithic / Early Bronze Age

The dominance of hazel in the early prehistoric period was also seen in pit C05-1339 and gully C05-1346, located to the south of the medieval settlement, and in an isolated group of features located between Platforms 4 and 5, where birch and occasional maloideae were also identified.

5.4.3 Middle Bronze Age

The four platforms (Platforms 2, 3, 4, and 5) spanning the northern slopes of the valley were found to contain a variety of species, probably deriving from fuel wood. A small, but varied charred plant assemblage was also recovered, providing valuable information on the inhabitants diet.

Charcoal recovered from the features within Platform 4, including hearth C05-1055, was predominantly birch and hazel. The charcoal assemblages deriving from the features forming Platform 5 (including three post-holes, C05-1114, C05-1136, and C05-1126, pit C05-1101, gully C05-1107, and occupation deposit C05-1095 – not illustrated) revealed hazel as the dominant species type, with birch as the second most commonly occurring species. Other species present, but in smaller numbers, were maloideae in post-hole C05-1136 and oak in post-holes C05-1136 and C05-1126. An isolated pit, C03-1092, located to the north of Platform 5 contained a mix of hazel, possible cherry, and maloideae charcoal.

The charcoal analysed from Platform 3 comprised 26 features including seven pits, five ditches, eleven post-holes, and an occupation layer. Charcoal assemblages from post-holes and pits from across Platform 3 were dominated by hazel and birch with small amounts of maloideae, oak, prunus-type, and willow. Platform 3 also contained the largest amount of cereal grain (Timpany 2012b). Hulled (Hordeum vulgare) and naked barley (Hordeum var. nudum) grains were concentrated in the fill of gully C05-0090 together with a small number of charred hazelnut shell fragments. Wild taxa present included vetches, mustards, corn spurrey, and plantains. These plants are commonly associated with disturbed and arable ground and may have derived from occupation debris.

Platform 2 was the most southerly of the platforms. Birch and a small amount of hazel were identified in hearth C05-0091. Although birch is an excellent fuelwood it burns quickly due to its high tar content and is best used when mixed with other species or as kindling (Bishop et al 2015).

A variety of wood species including maloideae, birch, alder, willow, and hazel, were identified in pit C05-0066, this was the largest variety of taxa seen in all the platforms at Midlock Valley. The charcoal was relatively unabraded, suggesting that it had not moved far from the source of burning. It is likely that the deposit is fuel debris given its proximity to hearth C05-0091.

Charred plant remains recovered from Platform 2 included a small number of hulled and naked barley grains together with oats. Wild seeds included buttercups, ribwort plantain, sheep's sorrel, and corn spurrey (Timpany 2012b). Like the plant remains recovered from Platform 3, all are typical of grassland and cultivated ground and may have been incidentally brought into the house with fuelwood.

The majority of charcoal analysed from the platforms may have been the remnants of the wattle fences. Overall, hazel and birch charcoal were the most commonly identified taxa supporting the pollen evidence from the pollen core taken in Camps Water for the presence of birch-dominated woodland locally. Hazel and birch were also recovered in the hearths from Platform 2 and Platform 3, indicating that they were not exclusively used for structural purposes.

The charcoal assemblage from the platforms was very similar to that at Lintshie Gutter, an unenclosed platform settlement with an occupation period dating from the Late Neolithic/Chalcolithic through to the Middle Bronze Age (Terry 1995). Lintshie Gutter was located on the southern side of the Clyde Valley, approximately 4km to the south-west of Midlock Valley, close to the confluence of the Midlock Water with the larger river; the settlement lies at a similar altitude (300m AOD). Here, hazel and birch charcoal were also the dominant taxa. Oak was also identified though in very small proportions (Dickson 1995). Similarly, hazel and birch were the dominant structural components at the unenclosed platform settlements at Fruid Reservoir (Ward 2013) and Green Knowe (Jobey 1980), both located in Peeblesshire, although willow, alder, and oak were also identified.

The presence of oak (albeit in small proportions) at both Midlock Valley and Lintshie Gutter is interesting and suggests that it was present in the landscape but deliberately not selected for fuel. Hazel and birch have fast-grown stems which are ideal for hurdles and other structural functions and would be ideal for lighter structural purposes. In the case of the platform settlements, they were used to make retaining fences either side of a stone, turf, and earth core wall.

5.4.4 Iron Age

Charcoal was recovered from the four-post possible porch C05-3133, hearth deposit C05-3148, and two post-holes, C05-3115 and C05-3161, that formed part of the post-ring of the roundhouse on the south side of the valley. The resulting overall charcoal assemblage from these features comprised birch, hazel, maloideae, alder, and small quantities of willow. All the charcoal derived from small diameter roundwood.

A small number of charred barley grains were recovered indicating some level of cereal cultivation

in the vicinity. Occasional hazelnut shells were also present suggesting that 'wildfoods' supplemented the diet during the Early Iron Age (Timpany 2012b). Evidence for the consumption of hazelnuts was also seen at Camps Valley (Section 4.4) and the northern slope of Midlock Valley (this chapter).

Overall, the charcoal assemblage indicates that hazel, birch, and alder were still widely available in the landscape in the Late Iron Age and that the available taxa appear not to have changed. Armit and Ralston (2003) suggest that the species composition of Scotland's woodlands during the period from 1000 BC to AD 500 remained unchanged from earlier prehistory. Palynological studies present a complex picture of woodland composition, decline and regeneration through the Iron Age linked to anthropogenic and climatic factors (Tipping 1994; Tipping et al 2012; Edwards et al 2019).

5.4.5 Early Historic Period

Charcoal analysis was undertaken for the fills of pits containing early historic ironworking debris with the intention of establishing what environmental resources were being utilised for these processes.

Alder was the most abundant taxon in all but one of the features analysed. Occasional fragments of hazel and birch were also identified. The dominance of alder in all features and complete absence of oak is interesting. Oak was usually the preferred fuel in the smelting process (Section 3.4) as it is able to produce the high temperatures required for smithing purposes (Cressey 2011). Alder is a poor fuel wood, but it does make good charcoal for smelting purposes (Edlin 1973; Gale & Cutler 2000) and is often found together with metalworking slag. Alder and oak were frequently used in bloomery furnaces (Crone & Campbell 2005) so it is possible that the alder here may have been used in a similar function.

The dominance of alder and lack of other taxa in the charcoal assemblage, however, may be explained also by the sudden and dramatic loss of woodland during the early historic period (see Chapter 2). The change is suggested to relate to woodland clearance to make way for areas of agriculture rather than grazing (Timpany 2015).

5.4.6 Medieval

Charcoal was analysed from three features from Structure 1, including gully C05-0279, post-hole C05-0332, and pit C05-0021. Birch was commonly identified in all features. The greatest variety of species was present in pit C05-0021 where alder, hazel, birch, and willow were identified. A small number of charred plant remains, including a hulled barley grain and a single oat grain, were recovered from Structure 1 (Timpany et al 2012).

5.4.7 Summary

The charcoal and plant macrofossil assemblages, when viewed in combination with regional and local pollen data, offer insight into the character of the landscape of the Clyde Valley from the Mesolithic to the early historic period.

The character of wood being utilised for both structural and fuel purposes in the sites excavated in Midlock Valley was similar both spatially and temporally, suggesting that the local woodland composition remained largely unchanged throughout these periods. Hazel, birch, alder, and maloideae were generally abundant throughout. The only notable exceptions to this were the absence of birch in Neolithic features, and the general absence of oak in all features, except for the Neolithic pit and Middle Bronze Age pit at Platform 3. The reason for this is not clear but may have been related to supply.

The composition of the charcoal assemblage suggests that the most abundant, locally available taxa were utilised. Fuel would have been collected from any available source including woodland and possibly hedgerows, although no evidence for hedgerows was observed. The landscape would have been largely open wet grassland and heathland, indicated by the high herbaceous pollen values, and the recovery of plant macrofossils such as plantains, that are typically found in grassland. The presence of cereal grains indicates some level of arable agriculture, probably in the vicinity of Platform 3.

Latterly, during the early historic period, there was a marked decline in arboreal pollen, when tree and shrub pollen fell dramatically, indicating a loss of woodland, perhaps to make way for agriculture. This widespread removal of trees in the landscape may be reflected in the charcoal record at the early historic site, where alder and willow, neither of which are good fuel woods (Bishop et al 2015), were used for metal production.

5.5 Discussion

The presence of multiple previously known UPS sites across the Midlock and Clyde Valleys gave an indication that unknown platforms might survive underlying later agricultural improvements such as the lower slopes of Midlock where the cable routes ran adjacent to the scheduled monument. However, the results from the excavations revealed a significant longevity of occupation on both sides of the valley for several millennia, from the Mesolithic to the medieval, with varying levels of intensity, which was less expected.

5.5.1 The Beginnings of Settlement in the Early Prehistoric Period

The presence of two lithic artefacts points to activity in Midlock Valley in the Mesolithic, although no Mesolithic features could be identified. The nature of Mesolithic activity can leave only faint traces, easily destroyed by subsequent occupation, and the stone fragments are the only evidence from this period on the site. Excavations in Camps Valley (see Chapter 4) revealed more tangible evidence of Mesolithic activity in the form of pits, so it is not surprising that there was also a presence in Midlock Valley; this shows that hunter-gatherers were moving throughout the Clyde Valley, and there would have been little distinction between the two locations to people at the time.

Early to Middle Neolithic activity was identified across the northern side of the valley. Three pits may have resulted from a one-off event. They are similar in type, date, and function to some of the pits recorded in Camps Valley, although the Midlock Valley pits lack the distribution and density of the pits seen in Camps, and the valley lacks the potential focus for activity offered by Normangill Henge. While the later platform settlements may have removed archaeological evidence of earlier periods, the lack of features of Early to Middle Neolithic date on the southern side of the valley, outwith the platforms, emphasises the distinction between the two valleys, substantiating the theory that they were used differently by Neolithic people. Artefactual evidence of the Early to Middle Neolithic is for the most part residual, emphasising the dynamic nature of the sediments on the hillside.

The isolated group of supposed Late Neolithic/ Early Bronze Age features located south of Platform 4 appear to represent a localised focus of domestic activity on the hillside. It is possible that the curvilinear ditch and the arc of stake-holes (as well as the gully to the east of Platform 3) which share similar profiles, dimensions, and plans to the features at the rear of the numbered platforms, represent a vestige of roundhouses that formed part of the unenclosed platform settlement. On the strength of the radiocarbon dates the features predate the UPS, but the insecurity of the material used to obtain these dates and the similarity of the features' characteristics suggest a contemporaneity.

The fills of the pit features immediately to the north-west of Platform 5 could have derived from the accumulation of material from nearby (unidentified) hearths and are further evidence of localised domestic activity at this time. The presence of Beaker pottery dating to between c 2500 and 1800 BC in a pit pre-dating Platform 3 and the thumbnail scrapers from Platform 2 represent activity in areas on which platforms were subsequently constructed. It is possible that this is evidence of the origins of the platform settlements themselves. Radiocarbon dates from the UPS of Lintshie Gutter inform a similar observation (Terry 1995, 425) and suggest an occupational history running from a possible Late Neolithic/Chalcolithic date through to the Middle Bronze Age period. As with the pits in Camps Valley (see Chapter 4) these pits represent evidence of human activities – whether ritual, domestic, or a combination of the two is unclear.

Except for the hearth – found significantly further upslope than the other features – the group of features recorded on the southern side of Midlock Valley was clustered on or around a small natural plateau which overlooked the site of the roundhouse and enclosures. The choice of locations of these features seems to indicate the exploitation of natural platforms in what appears to be an otherwise steep or boggy local environment. Similarly, a group of four Middle Neolithic features in Camps Valley (Location C; see Section 4.2.2) was located in a slight hollow on the slope of the hill. The radiocarbon date from the possible cremation burial places it within the Early Bronze Age; a date contemporary with some of the earlier settlement recorded on the northern side of the valley. This contemporary date and the inter-visibility of the two locations may indicate a purposeful connection.

The Bronze Age is noted for the variety of methods for treating the dead with both inhumations and cremations being interred and concealed under cairns or barrows or within areas delineated by banks, palisades, or unenclosed areas (Downes 2012: sect 5.5). The cremation cemetery at Fall Hill at the mouth of Midlock Valley has not been excavated but is morphologically similar to sites at Weird Law (MacLaren 1967) 12km to the northeast, and Whitestanes Moor 30km to the southwest (Scott-Elliot 1967), which were dated to approximately 1700 and 1660 BC respectively (Stevenson 1985) (with the caveat that these dates were not secured by modern protocols). An enclosed cremation cemetery was excavated at the head of Camps Valley (Ward 2021) and was dated to the Early Bronze Age, which coincides with the date obtained for the possible cremation burial in Midlock. Further evidence for upland Bronze Age cremation burials is known from Cloburn Quarry 22km to the north (Lelong & Pollard 1998b), where cremation pits dating to the Early Bronze Age were identified in association with timber post-ring settings, and at Blackshouse Burn (Lelong & Pollard 1998a: 50), where probable Bronze Age cremations were identified inserted into a Neolithic monument. It is notable that the examples above are associated with monumental architecture which is lacking in the solitary example from this site. It may be that this is part of an unenclosed cremation cemetery extending beyond the limit of excavation, but it should be noted that the feature was heavily truncated and the fragments of bone recovered were not identifiable to species. The interpretation as a cremation burial is tentative.

5.5.2 The Unenclosed Platform Settlement

UPS are considered a type of settlement particular to the Upper Clydesdale and Tweed Valleys although the technique of excavating a scarp and creating an apron is known at other locations as far afield as Sutherland and the south-west of England (Terry 1995; Pope 2015). In the upland border area of Scotland and England many platforms have been identified through survey including over 100 individual platforms surrounding the village of Tweedsmuir alone (Ward 2013: 5). At the time of writing only a few have been excavated: four at Green Knowe (Feachem 1963; Jobey 1980), eight at Lintshie Gutter (Terry 1995), two at Fruid Reservoir (Ward 2013), and one at Bodsberry Hill (Terry 1993b). The dates of the UPS range from the Chalcolithic (Platform 8 at Lintshie) to the Late Bronze Age (Platform 8 at Green Knowe) although most have been dated to the Middle Bronze Age.

To the list of excavated settlements can now be added the four platforms of Midlock Valley. These are part of a more extensive settlement that comprises at least a further 19 platforms at this location in the valley alone (11 of which lie within the Scheduled Area). The 19 platforms are clearly visible on the ground surface. In contrast to other excavations of this kind of settlement, where the limits of the platform are often defined before excavation, there was no visible evidence of Platforms 2, 3, 4, and 5 prior to excavation. The erosion of the apron at the front meant that their preservation was incomplete in contrast to the other excavated platforms where in most cases almost the whole platform was exposed.

5.5.2.1 Structures

All four excavated platforms were constructed in the same manner as those at nearby Lintshie Gutter UPS (Terry 1995) and Green Knowe (Feachem 1963). First a terrace was cut into the hillside and the excavated material was used to form a crescentic apron. This provided a level surface upon which a timber post-ring was constructed supporting a conical roof of thatch or turf. Where evidence for post-rings survive in the excavated examples listed above, they form a projected circle or in some cases (B1 – Fruid Reservoir; Platform 3 – Midlock; Platform 5 - Lintshie Gutter) a sub-circular arrangement. This sub-circular arrangement may have been a response to the shape of the platform created, but in the case of Platform 5 at Lintshie Gutter it was due to the presence of an oven and reflected the specialist function of the house (Terry 1995: 385). Some of the excavated platforms show evidence of repair (Platform 5 at Green Knowe, Platforms 5 and 13 at Lintshie Gutter, Platforms 2, 4, and 5 at Midlock). Repair may be considered

as evidence of the longevity of the roundhouse given that a structure built of organic materials is unlikely to last more than 5-10 years (Downes 2012; Crone et al 2019). The exposed locations of the platform roundhouses may also have been detrimental to the structures. They would have warranted maintenance to prolong their lifecycle considering the effort required to construct these platforms and the buildings on them in the first place. It would have been easier to repair an existing structure rather than fully rebuild a roundhouse on or near the same location; and potentially we should expect more repair of platform structures than would be found on a more typical non-terraced Bronze Age roundhouse. Evidence of repair is not evidence of longevity of occupation, and the use of the roundhouses may have been seasonal or at least episodic. Repair could have taken place after a period of inoccupancy of unknown duration.

The evidence from Midlock strongly suggests that the walls of the roundhouses comprised a doubleskinned wattle construction, filled with a core of packed stones, turf, and / or soil. The function of the narrow gullies immediately outside the line of the stake-holes in Platforms 2 and 5 may have been to hold wattle panels, rather than to divert water away from the rear of the buildings. This is indicative of a different phase of construction taking place. Multiple phases of construction were noted on platforms 7, 8, 13, and 14 at Lintshie Gutter (Terry 1995) and on Platform 2 at Green Knowe (Jobey 1980).

The platform excavated by Feachem at Green Knowe showed evidence of a double skin wall construction (Feachem 1963: 83) similar to the platforms in Midlock, but the other platforms at this site excavated by Jobey did not. Most of the platforms at Lintshie Gutter had two ring grooves functioning as bedding trenches for wattle and daub fences forming a 'cavity-wall' (Terry 1995: 422), while the platform at Bodsberry Hill (Terry 1993b) contained a double stone-built wall. The walls at Lintshie showed a greater variety of width (0.25m to over 1m) than Midlock (0.4m to 0.6m). The outer wall of the exceptionally well-preserved roundhouse ST2 at Black Loch, although Iron Age in date, comprised a double-skinned wall formed of two wickerwork walls 0.4m apart (Crone et al 2019). Brushwood and withies may have been used to pack the cavity between the walls but the carbonised nature of this material could also relate to the abandonment of the structure (ibid). The thickness of these walls suggests protection from adverse weather and insulation from low temperatures and implies a four-season occupation of the structures. The possibility of seasonal occupation of the platform settlements is raised by Pope (2015) and Terry (1995); potentially the evidence of the thick walls and repair of the structures suggests a more permanent occupation.

Projecting the curvature of the walls gives an indication of the diameter of the buildings. Platform 5 was the smallest with an external diameter of 7.5m, Platform 2 was c 10m, and Platforms 3 and 4 were c 12m. This puts the latter three platforms in the upper size range for buildings of this type, larger than the buildings at Lintshie Gutter (8–11m; Terry 1995: 379–91) and Green Knowe (7.7–10m; Jobey 1980: 78–80). However, it should be noted that the Midlock Valley platforms were incomplete in plan and these are extrapolations.

There were limited options for the location of the entrance into the roundhouses: an entrance facing uphill would allow water flowing downhill to access the interior and seems highly unlikely. Also, in most cases there was no space for access between the slope of the platform cut and the wall, so steps would have to be cut into the slope; no evidence of such steps was observed. Of the 15 platforms previously excavated elsewhere, only eight had entrances present - all appear to be orientated along the contour of the slope, none out to the front of the apron. None of the platform entrances at Midlock have survived; however, an indistinct ledge to the west of Platform 4 may be the remains of a track leading up to the platform, and an unoccupied 3m wide area to the east of Platform 5 may indicate the approach to the building. This tentative evidence conforms to the evidence from the other platforms that the entrance reflected the contours of the slope.

Platform 4 had no evidence of a ditch at the rear of the building, which may be due to a lack of preservation. Platform 3 contained a large, wide ditch possibly functioning to divert water – similar ditches were recorded at the two platform settlements at Fruid Reservoir (Ward 2013: 20, 42) – but also functioning to provide material for the Platform 3 apron.

5.5.2.2 Internal Features

Hearths were present in nine of the previous platforms excavated and were evidenced by scorched areas of subsoil or pits lined with fire-reddened stones. Five hearths (in Buildings 1 and 2 from Fruid Reservoir; Platform 4 at Midlock; Green Knowe; and Bodsberry Hill) were centrally or near centrally located – the others were offset from the centre. In two cases (Platforms 5 and 8, Green Knowe) the hearths were located close to post-holes as in Platforms 4 and 5 at Midlock; if contemporary these would have required some means of protecting the posts while the hearth was in use.

The hearths excavated at Midlock were ill-defined and indistinct. In Platform 5 a hearth was only identified through the presence of a patch of oxidised soil caused by prolonged exposure to heat. Platform 3 contained signs of two hearths within the central part of the building with a partly stone-lined pit between them which may have functioned as an ember pit used to store glowing embers from the fire overnight. It is possible that some of the stone-lined pits seen in previously excavated platforms may have served a similar purpose. The hearth in Platform 2 was surrounded by 17 stake-holes some of which roughly mark the limits of burnt ground and could have held uprights for suspended cooking vessels, or to separate a cooking area from the rest of the structure. The same interpretation is offered for the stake-holes recorded around the hearths on Platform 8 at Lintshie Gutter (Terry 1995: 391). The lack of stake-holes around hearths on other platforms may be due to a lack of preservation rather than a genuine lack of presence.

Shallow pits and scoops were noted at nearly all the excavated platforms, although as with the pits uncovered within the platforms at Midlock there was a lack of evidence for their function other than they are likely to be linked to activities within the building; the exact nature of the activities remains unclear.

5.5.2.3 Industry

It was clear that Platform 4 had a strong association with the production of cannel coal napkin rings with evidence found of the complete process of manufacture from preparation of the roughouts to finalisation of the finished form. The cannel coal assemblage recovered here is one of the most exciting finds from the project and makes a significant contribution to the knowledge of the fabrication process of these fasteners. The presence of a workshop is an extremely unusual find. As fragments of pottery and a quern stone were also recovered it is possible that the structure functioned as both a domestic space and an industrial one, or one use followed the other. A roughout was found in the house on Platform 5 and a small fragment of a finished item was retrieved from the fill of a pit on Platform 2. While the latter platforms were not directly associated with napkin ring production, the finds do suggest some industry was present across the UPS and that all three platforms are roughly contemporary, which is backed up through the radiocarbon dates.

5.5.2.4 The Occupation of the Settlement

It had been thought that the four platforms located on the Midlock Valley hillside may have represented different phases of occupation, with one platform being abandoned for another. Although not all of the radiocarbon dates can be considered entirely secure, they indicate that Platform 5 was the earliest, occupied between 1600 BC and 1500 BC, and the other platforms were occupied in a date range between 1500 BC and 1300 BC. It is not possible to determine whether the latter were contemporary or were occupied at different periods within that time frame.

The only evidence for stratigraphic phasing of the platforms themselves is where Platform 3 cuts Platform 5. If the layout of the full apron for the latter is projected, it is impossible that they would have both been fully functional at the same time.

The presence of crushed vessels within the eastern end of the ditch at Platform 3 gives an insight into the abandonment of the UPS. It seems likely that the vessels were both intact when they ended up in the ditch and are likely associated with the abandonment of the roundhouse; particularly as residue on one pot produced the latest radiocarbon date out of all the platforms (1495–1300 cal BC). Crushed vessels in the ring-groove of a Bronze Age roundhouse (although not a UPS) were also observed at West Acres (Toolis 2005: 492) associated with the abandonment of the settlement. The possibility of ritual activity was rejected in favour of the more mundane theory that the vessels were either too large or cumbersome to be worth transporting, and the same interpretation is valid here.

Once abandoned the hollow left by Platform 5 was used as a rubbish pit - the lower infill above the occupation layer may represent the deliberate deposition of waste material in the hollow of an abandoned house. Platform 7 at Lintshie Gutter (Terry 1995: 389) showed evidence of midden material being dumped in the hollow left by the platform. Subsequent improvement of the land by ploughing, seen in a pattern of striations aligned north to south on aerial photographs, on a relatively steep slope would promote rapid erosion with substantial hillwash. The accumulation of rubbish and hillwash would explain the disappearance of any above surface evidence of platforms. The visible platforms in Whelphill have retained their profile and it is possible these are the most recent platforms; after their abandonment there was no subsequent occupation to generate waste that could fill the scoop. Although their location on the steeper slope and the resulting greater size of the scoop may have meant that they were not so easily filled with hillwash as the platforms on more shallow slopes, and therefore presented more of an obstacle to ploughing.

There were varying degrees of preservation in the excavated platforms – Platform 4 appeared the most affected by erosion as no remains of the apron had survived. In all platforms only part of the rear of the structure was well preserved; the aprons and the post-holes, walls, and internal features built on them had been eroded away.

5.5.2.5 Unenclosed Platform Settlement Summary

The evidence for UPS where they survive above ground comprises the flat, generally featureless, surfaces formed by the scoop and the apron. The presence of the platforms themselves hints at the preservation of structures and environmental material beneath. It is notable that nearly all the platforms excavated to date lack uniform survival of the remains of the buildings that stood on them across the entire platform, even where the apron has survived intact. This is certainly true of the platforms at Midlock. No above surface remains of Platforms 2, 3, 4, and 5 existed prior to the excavation and the six platforms identified to the west of the site had been severely eroded (Ward 1992: 113). This erosion is the result of natural processes exacerbated by cultivation. The deliberate infilling of at least one of the excavated platforms by midden deposits was no doubt a factor in helping to mask the upstanding traces. The infilling is unlikely to have completely removed any trace of the platforms but the slight dimples in the landscape would not have provided much of an obstacle to the plough, which would have finally removed any visible trace of these platforms. The current surviving platforms visible on the hillside to the east of the site (the Scheduled Monument) are on a steeper slope which has mostly escaped the agricultural practices that contributed to the erosion of the others.

Two significant contributions of the excavation at Midlock are the investigation of an upslope / downslope slice through one of these settlements, whereas previous excavations have focused on individual platforms; and the recovery of the cannel coal assemblage with the probability that the occupants of one of the platforms were specialists in the production of napkin rings and possibly bangles, contributing their wares to a wider distribution network.

5.5.3 Iron Age

5.5.3.1 The Roundhouse

The roundhouse structure on the southern side of Midlock Valley is situated in a prominent location on the edge of the eroded river terrace and appears to be an isolated farmstead. This type of Iron Age unenclosed house site is a rare find in the archaeological record for the region (Alexander 2015, 4) especially one of this Late Iron Age date. The 'annex' ring-gully represents a fenced enclosure rather than another roofed building and would have been used for livestock. There is little to suggest more than one phase of construction, but this may be due to truncation where only the earliest phase of the features survive. The structure is very poorly preserved and any interpretations of it are necessarily simplistic.

The post-ring supported a conical roof which may also have rested on a low outer wall. The evidence for the form of the outer wall lies in the positioning of the post-holes at the entrance with the implication that they mark the gap in a roughly one-metre-wide turf bank. In this interpretation the ring-gully functioned as a drain or eaves drip gully. The ring-gully of the annex may also have functioned as a drain, although not specifically an eaves drip gully as it lacked a roof and no evidence for a fence or wall was recovered.

The lack of Iron Age artefacts from the roundhouse can be explained by the heavy truncation of the features. This lack of artefacts was also noted at Newton Plantation (see Chapter 6) where a possible Iron Age structure did not produce evidence of domestic material culture.

Evidence of Iron Age activity was not solely focused on the terrace occupied by the roundhouse, it was also found on the northern side of the valley in the form of the two four-post structures. These are both likely to be Iron Age in date, though such dating is based on typology as the origin of the radiocarbon samples for both structures is uncertain and may have resulted from erosion of surrounding deposits. Rectangular structures of four or more posts are often found on Iron Age sites, and in southern England are frequently interpreted as granaries, though not always on the basis of strong evidence (Dunwell 2007: 62). The lack of positive evidence for their function makes the Midlock Valley structures difficult to interpret. There is no evidence that they are exactly contemporary with the roundhouse and annex either. Their position on the opposite side of the valley and the lack of four post structures in the settlement suggests their location was an important aspect of their function, but the nature of these structures remains a major unknown (ScARF 2012c).

It has been noted that Iron Age riverside settlements, such as Shiels (Alexander 2015) and Braehead (Ellis 2007), may have made use of seasonal pasture; and this may be what is reflected on the southern side of Midlock Valley. The availability of seasonal pasture and the need to move cattle about may have contributed to a dispersed, individual settlement pattern in this area during the Iron Age (Alexander 2015: 7). The lack of phasing in the Midlock Valley roundhouse supports the idea of a single use of the structure, although multiple post-holes may indicate seasonal rebuilding.

5.5.4 Early Historic

Small-scale rural metalworking sites are difficult to detect from the surface and in many parts of the Scottish landscape are usually identified by chance through ground-disturbance works. Such sites are, therefore, poorly represented in the archaeological record.

The metalworking pits produced an early historic radiocarbon date of cal AD 430–620, the only evidence from this period excavated on the project. The evidence of blacksmithing activities in this period is a useful and significant addition to the corpus of sites in the Lanarkshire area, providing evidence of the production of metal objects at a local level.

No structures such as smithing hearths or smelting furnace bases were uncovered at the site and it is likely that the pits are the remains of localised occasional activity. The location on a low rise within the river plain would have protected the site from flooding while allowing access to water required by the metalworking activities. It is unclear from where the iron ore was being sourced. Iron oxide occurs widely in nature as bog ore for example providing large quantities of ore and it appears in several different varieties of rock, or as sand, or as waterborne deposits. All have been used in smelting processes in the past (Brophy 2005).

Very few sites in the area provide comparable evidence of ferrous metalworking of Iron Age or later, particularly early historic, date. At the early historic site at Dolphinton, South Lanarkshire, fragments of vitrified material, including abundant hammerscale flakes and spheres, were recovered from a large charcoal-rich pit surrounded by five post-holes (Heald 2002: 71). The range of metalworking debris present indicated that the pit had been the focus for blacksmithing activities during the early historic period and may have represented a truncated metalworking hearth.

There has been a suggestion that the study of ironworking should consider its symbolic and social nature (Hingley 1997). This may be related to the location of metalworking and the deposition of debris in particular places (Cressey & Anderson 2011: 23). The metalworking taking place within Midlock Valley may be interpreted within such a framework when considered alongside the large amount of multiphase evidence recorded across the wider Midlock and Camps Valleys. Was it purely a choice of good topographic location, or was it a reference to previous occupation of the land as a 'special place'?

Whilst there is no direct evidence for the metalworking being connected directly with the sites either side of it, the presence of the pits adds to the multiphase nature of Midlock Valley and the continuous re-use of the land. At Blairhall Burn, Amisfield in Dumfriesshire, five separate areas of archaeological interest were identified, consisting of two burnt mounds, two round-houses, part of a ring-groove structure, a possible platform house, and a metalworking area, which together represent a palimpsest of activity dating from the Neolithic to the early medieval period (Strachan et al 1998: 55); a similar collection of evidence to that recorded in Midlock Valley. These sites provided a suite of evidence which allows the tentative integration of distinctive structural types and artefacts. Such integration may be indicative of a continued recourse to a 'special' area (ibid: 92); a highly likely scenario for Midlock Valley.

The investigations have revealed metalworking activity within a valley occupied over several millennia, and no matter how limited, the results from the site in Midlock Valley add to an area of the archaeological record which is, to date, poorly represented (ibid: 91). This evidence builds a picture of craft activities taking place on enclosed and unenclosed settlement sites across the region and enhances our understanding of technological processes undertaken from later prehistory onwards.

5.5.5 Medieval

The presence of the medieval settlement within the Midlock Valley was unexpected. Few rural medieval settlements have been identified in Scotland. The most notable are Springwood Park near Kelso (Dixon 1998), Eldbotle near Direlton (Hindmarch & Oram 2012), and Halhill near Dunbar (Mitchell & Anderson 2011). While these sites produced a greater number of finds and showed far better degrees of preservation than at Midlock Valley, the evidence from those excavations informs the interpretation of the building discussed here. Structure 1 was identified as a cruck-framed building on an east-west axis running across the slope, with an enclosure defined by a ditch extending to the north. The evidence of enclosure ditches cutting each other suggests different phases of activity with relationships between these phases made difficult due to similarities in the fills.

The crucial element in recognising a cruck-framed building is the stone pads on which the blades of the cruck would have rested. Only two stone pads were identified; other shallow pits (which are the same depth as the ones containing post-pads) may have contained pads which were later removed during abandonment of the building. With the other shallow pits, they formed the northern wall of a structure c 10m long. The crucks of the structure would have formed bays - the evidence from Springwood suggests a bay width of 2.5m to 3m (Dixon 1998: 696). The distance between the post-holes in Midlock Valley indicates bay widths of 2.9m, 3.5m, and 3.1m (measuring from east to west). However, the two outlying post-holes could be the remains of an earlier or later phase of building.

Unlike the Bronze Age roundhouse builders, the medieval constructors did not cut into the slope to create a level surface for their building. Assuming the long arms of the A-frames would have been equal in length, a flat surface or wall to raise the ground 0.6m above the geological subsoil would have been required in order to support the southern side of the structure (this also assumes a width of 5m for the structure based on the evidence from Springwood). The excavation of the shallow pits to contain the post-pads may be an attempt to compensate for the slope at this location. The floor surface within the structure would likely have corresponded to the slope as there was no evidence of a scoop into the hillside to provide the material required to build up the floor to a level surface. As with the aprons of the UPS structures any evidence of ground-raising has been destroyed by subsequent ploughing activity.

The function of ditch C05-0297 and its relationship to Structure 1 is uncertain and remains enigmatic. It is very unlikely to be a foundation ditch for the southern wall, as Structure 1 would then be only 2m wide. It is also unlikely to have functioned as a drain. Drains were observed in the structures at Eldbotle and Springwood and considered indicative of a structure shared by humans and animals, however they were much narrower than ditch C05-0297 and stone-lined rather than stone-filled.

A possible sub-rectangular building with similarities to the one at Midlock was recorded at Titwood, East Renfrewshire (Johnson et al 2003). The structure appeared to be defined by narrow gullies and it had a long shallow ditch running down its central axis. It was found in association with an early historic palisade enclosure although the poor quality of the survival of the archaeological features made interpretation difficult (ibid: 136). It is unclear from the evidence uncovered what the function of the medieval structure in Midlock Valley was. Possibilities include a domestic dwelling, a barn or byre, or a store. The evidence of the padlock may indicate seasonal use of the structure and that it was secured during periods of inoccupancy.

It is interesting to note that Enclosure 1 did not encompass Structure 1 but defined a space to the north of it. Its primary function on a slope such as this must have been to divert water running downhill away from this space. However, water flowing down the arms would have overflowed into the ends of the building – it could be that gully C05-1324 was excavated at the western end of the structure to correct this design flaw. The presence of a second enclosure ditch raises the possibility of another structure to the east of Structure 1, beyond the limit of excavation.

The space defined by the gullies is more important than the gullies themselves, but the features uncovered within the area offer a confused picture. The alignment of post-holes in Enclosure 1 suggests the division and separation of activities, while the pits within Enclosure 2 are indicative of food preparation and storage. In addition, there is the caveat that these features are undated and may belong to a different phase of activity altogether, unrelated to the medieval settlement. To some extent, the medieval evidence remains somewhat enigmatic.

It is likely that the medieval settlement was part of the estate belonging to Crawford Castle, located 2.5km west of site at the entrance of the Midlock and Camps Valleys on the northern bank of the River Clyde. The castle was the administrative centre of the barony of Crawford and was occupied by the Lindsay family from 1215. The Lindsays were part of the colonisation of Upper Clydesdale with alien overlords by the Scottish monarchy in order to establish a feudal organisation in a strategically important area (Tabraham 1978: 126). The location of the settlement in an out-of-the-way valley and the presence of the padlock bolt conjure up narratives involving prisoners, escapes, and pursuits which are probably best left to fiction writers.

The fragmentary nature of the medieval settlement remains contrast with the rural medieval settlements of Springwood Park and Eldbotle and the impression is of a temporary, short-lived structure. This bears out the view of settlements as being fluid and dynamic (Dalglish 2012: 273), and subject to abandonment which is not unexpected in a fragile upland environment.

5.5.5.1 The Linear Enclosures

From the moment of its discovery and during its excavation, the northern enclosure was referred to as a 'micro-cursus' by the field team and it seems to resemble a cursus monument in plan, albeit on a tiny scale, with its parallel ditches and convex terminals. It shares some of the architectural vocabulary of non-megalithic Neolithic linear monuments such as the linear plan and the division of the structure through the use of pits (Cook & Dunbar 2008: 304) however it lacks evidence of other elements such as the presence of mounds or banks, the use of segmented ditches, use of oak for palisades or posts, and use of fire / burning events before and / or after construction. Cursus monuments in Scotland are noted for their variation in size (Brophy 1998: 92) but the Midlock Valley 'cursus' would be one of the smallest (at 50m by 5m) in contrast with the 2.5km long and 85m wide cursus at Broomy Law (Canmore ID 73422) only 14km to the northeast.

Although the northern enclosure ditch respects the Iron Age roundhouse ditch, the linear plan of the enclosures and the size and sequence of the ditches does not match the large oval shape usually seen in Iron Age enclosure sites such as Braehead south of the Clyde (Ellis 2007) and Shiels near Govan (Alexander 2015).

Neither of the Midlock Valley enclosures can be dated by scientific or stratigraphic means. There is no stratigraphic relationship between the enclosures and either the Bronze Age pit, the Iron Age roundhouse, or the sheep buchts. The washed in material dating to the Iron Age in the ditch could date from any time. The position of the southern enclosure suggests a direct association with its northern counterpart. Each enclosure appears to acknowledge the presence of the adjacent structures (the roundhouse and the sheep bucht) but this is very likely to be chance.

An alternative interpretation is that the linear features are the remains of a sheepcote, a narrow linear covered structure built to provide shelter for sheep over the winter, as well as storage for fodder. An archaeological evaluation (Lowther 2020) of the upstanding earthworks of a long building in Bothwell Water, 80 km to the north-east of Midlock Valley, revealed a stone structure dating to the 13th century. Like the Midlock Valley enclosures the structure was also located on a low river terrace. The floor area of both the northern enclosure and the Bothwell Water structure measured 250 sqm or 300 sq yards. According to Dyer (1995: 151) the usual size of a flock of sheep assigned to a shepherd was 300, and the common accommodation space allocated to a single sheep was 1 sq yard (although it is noted that Dyer's sources date to between the 14th and 18th centuries).

A shallow curving linear ditch was recorded underlying the stone walls of the Bothwell Water sheepcote and this was interpreted as relating to the construction of the building (Lowther 2020: 10). Possibly the ditches that form the northern and southern enclosures served a similar purpose. If the interpretation of the enclosures as sheepcotes is correct, they represent the only evidence of what would have been substantial structures. The removal of nearly all elements of the sheepcote, bar the gullies, suggests a significant change in agricultural use of the terrace.

5.6 Conclusions

The evidence of the excavations in Midlock Valley has painted a picture of the importance of this landscape throughout prehistory and history. Episodes of occupation from the Late Neolithic to the Middle Bronze Age has been identified and evidence of Early Bronze Age activity may constitute the origins of the unenclosed platform settlement. A rare unenclosed Iron Age homestead was excavated, and evidence of an even rarer rural medieval settlement uncovered. This evidence of occupation reflects the use of these dramatic valley landscapes and the resources they provide. When considered alongside Camps Valley, we can begin to see how people made different uses of the two valleys; Midlock Valley being a place for people to settle and work, and Camps Valley being a place of pilgrimage and reverence.

6.1 Introduction

An area of 0.2 ha was excavated at Newton Plantation, which lies on the lower slopes of the Clyde Valley on the eastern bank of the river (Illus 6.1). The excavated area lay at a height of c 275m AOD on the edge of a gently sloping parcel of land between two hills (Bodsberry Hill and Wellshot Hill). The village of Elvanfoot is located around 600m south-west of the excavated area on the western bank of the River Clyde, and Newton Burn, a small tributary of the Clyde, runs some 150m to the south-east of the site. The topography of the Clyde Valley in the immediate vicinity of the excavated area bears similarities to the location of Woodend (see Chapter 3) although the slopes of the hills are steeper and the valley in general narrower at this point, being further upstream. The uncultivable nature of the steeper slopes is likely to be the reason they are now covered in extensive forestry plantations which may be concealing archaeological evidence below.

The excavation took place during the winter of 2009–2010 (Illus 6.2) and revealed the scant remains of a Late Iron Age structure, with some associated pits providing evidence of non-ferrous metalworking.

6.1.1 Radiocarbon Dates and Dating

The only artefact recovered from the site came from the fill of a pit and comprised fragments of a ceramic casting mould of a type found from the Iron Age to the early medieval period. One radiocarbon date was obtained from charcoal recovered from the fill of the same pit (Table 6.1). Both the charcoal and the mould are interpreted as the waste material from metalworking activities which were deliberately deposited in the pit.

6.1.2 Background

Archaeological sites have been identified throughout this part of the Clyde Valley (Illus 6.3), with settlement during the Bronze Age and Iron Age periods being of particular note. Unenclosed platform settlements are recorded on the lower slopes of the hills on either side of the Clyde and include Cakelaw Burn (Canmore ID 79458), Lodge Hill (Canmore ID 79457), Ellershie Hill (Canmore ID 47293), Elvanfoot (Canmore ID 47323), and Bodsberry Hill (Canmore ID 47296). Excavation revealed that one of the platforms on the southern flank of Bodsberry Hill was dated to the Middle Bronze Age with reuse of the platform in the Early Iron Age (Terry 1993b). Three burnt mounds (Canmore IDs 79405, 79427, and 72526) are recorded on the western side of the valley, a possible burial cairn is recorded on the northern slopes of Wellshot Hill (Canmore ID 79440), and a large earthwork (Canmore ID 47311) undated and unexcavated is tentatively suggested to be a Bronze Age ritual site (Ward 1992: 162).

The narrow nature of the Clyde Valley at this point may account for the number of sites with defensive characteristics. A hillfort (Canmore ID 47288) on the summit of Bodsberry Hill overlooking the site has not been scientifically dated but is likely to be Iron Age. The Roman temporary camp of Little Clyde (Canmore ID 47314) is located 3.5km to the south-east and survives as an upstanding earthwork, one of the finest of its type in the country. On the western side of the river the remains of a medieval bastle (fortified farmhouse) (Canmore ID 47320) have been recorded.

There is evidence of possible prehistoric and historic agricultural practices with lynchets within cairnfields noted at Lodge Hill (Canmore ID 47306), five clearance cairns on natural terraces on the north side of Wellshot Hill (Canmore ID 79443), and 25 small cairns on the northwest side of Bodsberry Hill (Canmore ID 47302). Earthworks

Table 6.1 Radiocarbon determinations from Newton Plantation

Lab Code	Context No	Material	Radiocarbon Age вр	Radiocarbon Date (95% probability)
SUERC-58833	07–0009	Charcoal: Alnus glutinosa	1927±29	cal AD 5–135



Illus 6.1 Location of site at Newton Plantation. ($\ensuremath{\mathbb{C}}$ Headland Archaeology (UK) Ltd)



Illus 6.2 View north-west of site under investigation. (© Headland Archaeology (UK) Ltd)

interpreted as possibly late medieval cultivation remains (Canmore ID 47318) 0.9km to the south-west of the site. Other undated sites within the valley include enclosures (Canmore IDs 74681, 79461, 47303, 74677 and 47307) and a possible standing stone (Canmore ID 340298).

6.2 Archaeological Results

The excavation comprised an area forming a triangle measuring 37m by 33m down two of its sides (Illus 6.4). The total area of excavation was 2,000m².

6.2.1 Structure

An arc of features (C07-0014, C07-0015, C07-0018, C07-0038, and C07-0030) was identified at the north-western corner of the excavation (indicated by the red flags in Illus 6.5). They are interpreted as heavily truncated post-holes as they were all circular in plan with similar diameters of between 0.3m and 0.4m. All were filled with dark brown silty clay and although their profiles are not necessarily typical of a post-hole (Illus 6.6) they do represent the surviving basal elements of these. One, C07-0038, was slightly smaller and had a more gravelly fill, but its position on the arc indicates that it is associated with the others. The post-holes appear to form one side of a circular post-ring whose diameter, assuming a circular arrangement, would be around 17m.

A single pit, C07-0036 (Illus 6.7), lay within the arc of the post-holes. The pit extended beyond the limits of excavation to the north but can be assumed

to have been sub-circular or oval in plan, measuring over 1.2m in diameter with steep sides. It was filled with mid-brown clayey silt with a large number of medium to large sub-angular stones.

6.2.2 Associated Pits

A number of pits thought to be associated with the arc of post-holes were found adjacent to it and a short distance to the south-east. Pits C07-0008, C07-0010, and C07-0012 lay around 5m to the west and pit C07-0040 to the south. Pits C07-0008 (Illus 6.8) and C07-0010 were filled with charcoal-rich material, and fragments of a ceramic casting mould were recovered from the fill of the latter. A fragment of alder charcoal from pit C07-0010 provided a radiocarbon date of cal AD 135 (95% probability; SUERC-58833). The pits are interpreted as containing the metalworking waste material from hearths or kilns. The remainder of the pits contained limited environmental material.

To the south-east of the structure, pits C07-0045 and C07-0051 lay 0.65m apart, and pits C07-0002, C07-0004, C07-0006, and C07-0065 were located in a cluster 12m away. The pits were filled with light grey or brown sandy or silty clays. Again, they were heavily truncated, with pit C07-0045 the deepest at 0.3m (Illus 6.9).

6.3 Finds Synthesis

Julie Franklin

The only finds recovered from Newton Plantation took the form of 14 small fragments of a ceramic casting mould found in pit C07-0010. The pieces were associated with an Iron Age date of cal AD 5-135 (SUERC-58833). It provided the only evidence for non-ferrous metalworking encountered at any of the sites on the project. The fragmentary condition of the mould meant that the object being cast could not be identified. In addition, no metallic residues survived so the alloy-type being used could not be determined either. However, the mould's form is consistent with the type of two-part mould used throughout the Iron Age and early medieval periods. A few broadly contemporary sites in the region such as Hyndford Crannog, South Lanarkshire (Munro 1899: 381, fig 9), Crawford, South Lanarkshire (Maxwell 1972: 177; Dungworth 1996), Lochend

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Illus 6.3 Plan of known heritage assets around Newton Plantation. (© Headland Archaeology (UK) Ltd) SAIR 104 | 118



Illus 6.4 Plan of features at Newton Plantation. (© Headland Archaeology (UK) Ltd)



Illus 6.5 View west of arc of post-holes. (© Headland Archaeology (UK) Ltd)



Illus 6.6 South facing section of post-hole C07-0014. (© Headland Archaeology (UK) Ltd)



Illus 6.7 South facing section of pit C07-0036. (© Headland Archaeology (UK) Ltd)



Illus 6.8 West facing section of pit C07-0008. (© Headland Archaeology (UK) Ltd)



Illus 6.9 West facing section of pit C07-0045. (© Headland Archaeology (UK) Ltd)

Crannog, North Lanarkshire (Monteith & Robb 1937), and Craigmarloch, Renfrewshire (Nisbet 1996; Heald 2005: 114), have shown evidence for non-ferrous metalworking, and it is considerably rarer than evidence for ironworking. As such, the discovery of the mould is of some significance in its own right.

6.4 Environmental Synthesis

Laura Bailey

Charcoal from two pits at Newton Plantation was analysed. Charcoal recovered from one of the pits was related to non-ferrous metalworking activities. It is generally assumed that wood for specialised activities, such as metalworking, was purposefully gathered, perhaps based on suitability rather than availability. For example, woods such as oak are likely to have been deliberately selected for ironworking whereas domestic fires do not necessarily require particular trees for fuel (O'Donnell 2016: 162).

Hazel, alder, willow, and birch were all represented in the charcoal assemblage from

Newton Plantation and all would undoubtedly have been locally available. However, the variety of species used does not indicate particular species selection for metalworking activity, which provides an interesting contrast with the results seen from a similar, contemporary Iron Age metalworking deposit at Woodend (Chapter 3).

Woodend is located approximately 10.5km to the north of Newton Plantation at a similar altitude and also overlooks the Clyde. Like the assemblage from Newton Plantation, alder, hazel, birch, and willow were all represented at Woodend, though oak (a wood frequently used as a fuel for metalworking), heather, and maloideae were not. The presence of oak charcoal in conjunction with evidence for ferrous metalworking at Woodend and non-oak charcoal in conjunction with non-ferrous metalworking evidence at Newton Plantation could be an indication that different woods were being selected for use in different industries. This could be related to the different qualities of these woods when burnt. The absence of evidence from other palaeoenvironmental proxies such as pollen, however, means it is difficult to establish whether the species profile is the result of differential selection, or rather the absence of certain species in the landscape. Different wood types and different sized material burn in diverse ways. Large logs or off-cuts of trunk wood, in particular oak heartwood, which is denser than sapwood, provides a longer-lasting heat than narrow roundwood (Pelling 2012). Conversely, the narrow roundwood produces an intense short-lived heat due to the higher ratio of atmospheric oxygen to wood surface (ibid). Therefore, bundles of roundwood or brushwood would provide rapid high heat to establish a fire, which may have been more suitable for the required purpose at Newtown Plantation.

6.5 Discussion

The function of the arc of post-holes is difficult to interpret due to the truncated nature of the remains and the fact that the majority of the post-ring extends outwith the excavation area. The arc is very unlikely to represent the post-ring of a very large roundhouse and there is no evidence of a tradition of massive Iron Age roundhouses in the Clyde area. There is no stratigraphic evidence that the arc of post-holes and the metalworking waste in pit C07-0010 are contemporary. It can only be tentatively suggested based on the extremely limited evidence that the ring of posts was the remains of a fence demarcating an area within which the production of non-ferrous metal items took place.

Very few sites in south-west Scotland provide comparable evidence of non-ferrous metalworking. Ceramic fragments of moulds and crucibles found at Hyndford Crannog (Munro 1899), Lochend Crannog (Monteith & Robb 1937), and Craigmarloch Fort (Nisbet 1996) date from the Early to Late Iron Age. The nature of the sites (crannogs and a hillfort) suggests that such metalworking took place in areas noted for their defensive capabilities or at higher status locations. This would be indicative of power structures where metalworking knowledge and skill were confined to places where the activities and the artefacts that resulted could be controlled.

The date of the material recovered from the pit overlaps with the date of Roman activity in the area. The site itself is located less than 200m from the route of the Bodsberry Hill to Little Clyde section of the Roman road; the same Roman road along which many other Iron Age forts and settlements (including the Woodend Enclosure) are positioned. It is not known whether Newton Plantation would have been occupied at exactly the same time as the Romans occupied Little Clyde temporary camp, but evidence of interaction with the Romans by the inhabitants was not forthcoming at Newton Plantation. Where evidence of interaction with the Romans is found it takes the form of Roman artefacts recovered from Iron Age sites. It has been observed that Roman finds have been recovered on 40% of a sample of southern Scottish Iron Age sites (Hunter 2007a: 12) with a marked tendency towards more exotic Roman material (ibid: 16).

Three sites in southern Scotland within 40km of Newton Plantation show contrasting evidence of Roman–local interactions. A variety of Roman artefacts, including a penannular brooch, glass fragments, and pottery, were recovered during excavation of an Iron Age enclosed farmstead at Boonies (Canmore ID 67818), 40km south-west of Newton Plantation (Jobey 1975), even though it was not close to any Roman installations. Two fragments of Roman glass bangle from the 1st century AD were found on an Iron Age enclosure site at Uppercleugh (Canmore ID 66774), 30km south-west of site (Terry 1993a: 82), which was located 400m from a Roman road. It suggests that Late Iron Age people would have attached a value to this material (which was very different to their own wares) and fitted it into their existing Iron Age lifestyles and social systems (Hunter 2007a: 51). The goods would have been acquired by social elites of the Iron Age societies and distributed amongst the communities reinforcing bonds and hierarchies (ibid: 19).

Finally, the excavation of an enclosed Iron Age farmstead at Woodend Farm (Canmore ID <u>66918</u>), 23km south of site, found no evidence of Roman artefacts and therefore no interaction with the Romans despite its location 500m from a Roman road and not far from a Roman military structure (Banks 2000: 277). Two theories were proposed for the lack of evidence: one is that this might have been due to plough truncation; the other is that although the banks and ditches of the enclosure indicate a certain social status for the inhabitants of the farmstead, that status had eroded by the time the Romans passed through and they saw no reason to interact with those Iron Age farmers (ibid).

Clear conclusions about the nature of any interaction between the Romans and the Iron Age inhabitants of the Newton Plantation site cannot be made without more data than the very limited evidence from the excavation provides. Evidence from other sites suggests that such interactions were on the Romans' terms.

7. ROUTEWAYS AND TRANSFORMATIONS IN UPPER CLYDESDALE

Stephen Cox

7.1 Introduction

The archaeological excavations that took place as part of the Clyde Wind Farm and Extension have made a significant contribution to the advancement of archaeological knowledge in the region (Illus 7.1). This concluding chapter looks at the implications of the discoveries made during the project and considers some of the themes that have emerged from the analysis. The practical aspects of undertaking archaeological work on such a large linear upland infrastructure project and the methodologies employed are also considered.

7.2 Upper Clydesdale Lives

The hunter-gatherers of the Mesolithic were the first people to leave evidence of their activities in the valleys of Upper Clydesdale. This evidence suggests they lived mobile lives in small communities and their interactions with the landscape were fluid and undefined by boundaries. It is likely they moved through the land guided by its linear elements – the watercourses and ridgelines – and found food in the form of animals to hunt and nuts and fruit to gather. Over long time periods they began to assign meanings to the places they visited, meanings that formed part of their social memory and were passed on through generations (Lelong & MacGregor 2008: 269).

The transition from hunting to farming in Britain has been the subject of debate for many years. In the mid-20th century, the interpretation of the evidence favoured the introduction of farming by colonists arriving from the near continent. By the late 20th century, it was thought that the local hunter-gathers had acquired the knowledge of farming gradually (see Thomas 2013). Recent evidence, such as the analysis of British Mesolithic and Neolithic genomes (Brace et al 2019), points to an abrupt change from hunting and gathering to farming caused by the immigration of farmers (see Rowly-Conwy et al 2020). Whether this 'swift succession' (Mithen 2022: 65) involved the complete replacement of the Mesolithic population is arguable (Thomas 2022: 520) and the process / mechanism by which the change to farming took place is still subject to



Illus 7.1 View of topsoil stripping for access road on northern side of Camps Valley. This provides a typical view of the landscape of the wind farm. (© Headland Archaeology (UK) Ltd)(© Headland Archaeology (UK) Ltd)

debate. It is beyond the scope and the evidence of this publication to determine whether the Mesolithic population of Upper Clydesdale was replaced by immigrant farmers in a sudden event or series of events or whether the transition to farming was a gradual, incremental process, but it is noted that the evidence does not support one single model. Some models that suggest a continuity in the significance of certain places in Upper Clydesdale dating from the Mesolithic to the Neolithic such as Biggar Common (Johnston 1997) and Blackshouse Burn (Lelong et al 2005) rely on a continuity of the collective social memory. The archaeological data from the wind farm, in particular the radiocarbon dates in Illus 2.5, show a significant gap between 6000 and 4000 cal BC indicating for Camps Valley at least a lack of continuity from the Mesolithic through to the Neolithic. It is likely that the special status assigned to Camps in the Neolithic began then, and not in the Mesolithic. The change in the perception of the landscape from the Mesolithic's fluid relationship to the curation and transformation of the environment in the Neolithic was a break rather than a slow transition.

It is possible to see a change in the later Neolithic and Bronze Age from the significance of particular locations to the significance of the route taken between them (Lelong & MacGregor 2008). The importance of crop and animal management, the need for fresh pasture and the seasonal movement of both animals and people saw the Neolithic lines of communication and movement through Upper Clydesdale develop into routeways. The repetition of movement through the landscape or of visiting specific locations can be seen to some extent in the periodic nature of the pits found in both the Camps and Midlock Valleys, representing repeated visits over a long timeframe.

In the 2nd millennium BC the sides of the hills were transformed by the excavation of platforms. The roundhouses built on the platforms may have been occupied only for short periods of a few years but these periods were repeated at intervals for centuries (Halliday 2007: 50). The occupation is both sporadic and continuous or more appropriately continuing. It is not known whether the occupants alternated among the clusters of platforms on one hillside or visited different hillsides in different valleys. If all the platforms in a cluster were occupied simultaneously this density of occupation may indicate that a system of land tenure was in existence by the Middle Bronze Age. The lack of evidence for enclosed field systems around the platform settlements implies a separation in distance of stock and cultivation; the animals grazing remotely perhaps rather than in proximity to cultivated areas which would have required a form of division by bank or fence. The impression is of mobility within the landscape (ibid: 54) although still making use of the well-worn routes of Upper Clydesdale.

The change from archaeological evidence dominated by ceremonial activity in earlier prehistoric periods to archaeological evidence dominated by settlement activity does not mean that the Middle Bronze Age people were more practical or functionally minded (Lelong & MacGregor 2008: 273). The inhabitants of Midlock Valley continued ceremonial acts, potentially in a more routine and day-to-day pattern with individuals possibly being cremated and buried within sight of the settlements.

By the middle of the 1st millennium BC enclosed settlements and hillforts appeared along the banks of the Clyde Valley, belonging to larger communities bound by social and power hierarchies. The landscape was no longer curated but instead possessed. The topographical prominences chosen for the location of the hillforts and enclosures conveyed a message signifying social status, projecting power, and marking autonomy or independence. It appears that the communities who gathered at these focal points to emphasise their identities had abandoned them by the time they had to contend with the arrival of invading armies intent on colonisation and occupation who answered to the fluctuating demands of a centre of power half a continent away.

7.3 Transformations

Throughout prehistory people have actively interacted with the landscape and the materials within it, engaging, transforming, and manipulating both in various ways. Early evidence of this active interaction can be found in prehistoric pits. The debate surrounding Neolithic pits has focused on whether they were depositions of domestic waste material (Connolly & MacSween 2003: 43; Toolis 2011), ritualised structured depositions (Cook 2000 et al: 108; Pollard 2001), or somewhere on a spectrum between the two (Brophy & Noble 2012). The debate reflects the reduction of archaeological interpretations to dualisms such as domestic versus ritual and is a product of post-enlightenment rationalist thought. If instead rituals and ritual practices are seen as fundamental parts of daily life (Brück 1999: 319), then the Neolithic pits in the Camps Valley can be interpreted as the products of habitual behaviour that are based on ritualistic beliefs and social conventions.

Very few of the Camps Valley pits contained deliberately deposited objects such as fragments of pottery or lithics. The common element to all of them was charcoal though and therefore fire. Fire was important to everyday living. It was used for warmth and to provide light but it also had transformative qualities and was very likely to have been spiritually charged with significance since it was able to transform material from one state into another, raw food to cooked and clay to pottery for example (Illus 7.2). It must have had an essential role in the activities which resulted in the pits. The fire that created the pottery may have also imbued the pots themselves with power (Lelong & MacGregor 2008: 278). The manipulation of stone to form lithic tools and later on the manipulation of cannel coal to make fasteners lacked this spiritual significance since it lacked the element of fire. Of course, those activities may also have held spiritual significance, the evidence for which is lost.



Illus 7.2 Artefacts recovered from pit C11-0003. (© Headland Archaeology (UK) Ltd)

The deliberate burning of Neolithic structures has been interpreted as the creation of a spectacle that formed a memory of a place or event (Noble 2006) and it may be that the act of creating fire in the Camps Valley (Illus 7.3), as well as the act of excavating the pits marked an event that created a memory and contributed to a Neolithic sense of place and placemaking (Brophy 2016: 220).

The magical element of fire continued throughout the succeeding millennia as it was used to transform the bodies of the dead through cremation in the Bronze Age and to transform metals in the casting and alloying processes (Brück 2014: 136). Its spiritual significance in everyday life appears to have decreased in later prehistory perhaps as the tools it created had more practical applications. The Iron Age metalsmiths who left the traces of their work at Woodend and Newton Plantation were either itinerant workers providing a service to those who needed it or were individuals within communities who undertook smithing as and when needed; a more mundane practical application of the transformational power of fire.

Agriculture marked the start of the transformation of the physical environment, beginning with clearance for crops. By the 3rd millennium BC, as farming started to take hold, the land was being transformed as well with the construction of large-scale monuments such as the enclosure at Blackshouse Burn (Lelong et al 2005) and the henge at Normangill (Chapter 5). The increase in the scale of the interventions in the landscape required by developing agricultural systems is reflected in the creation of large monuments and reflects a change in the world views of the monument makers (Bradley 1991).

The existence of the Normangill henge suggests a continuity in the significance of the location maintaining a link with the past and possibly legitimising the activities of its builders and users. Its architecture stresses a separation and containment – a separation of the people and activities that took place within the circle from those outside and a containment possibly of supernatural forces or ancestral energies within. Its banks may have been a recreation of the surrounding ridgelines and an analogy for the surrounding landscape (Richards 1996), a transformation of the earth into a metaphor for the valley. If the ridgelines were seen to contain



Illus 7.3 Camps Valley during the Late Neolithic. (© Headland Archaeology (UK) Ltd)

the practice of pit-digging within the valley then the henge with its banks represents a significant shrinking of the space available to the worshippers.

7.4 Routeways and Places

The rolling hills of the Southern Uplands have formed barriers and constraints to the movement of peoples, and throughout both prehistory and history the paths of least resistance would have been the major valley systems and rivers (Noble 2006). It was along these routes that people travelled, made contact, traded ideas and goods, and undertook pilgrimages.

Henges are often located near watercourses potentially as part of Neolithic lines of communication and movement (Harding 2003: 97; Richards 1996). The presence of henges along the Clyde Valley (for example Corbiehall, Weston, Balwaistie, and Normangill) is indicative of the importance of the route for ceremonial activities. It is possible to imagine processions of people visiting the henges over several days at certain times of year, drawing on the past to legitimise and enable their actions. With the advent of the domestication of animals and settled agriculture, life would necessarily have been more static for people, although the concept of roaming over a wide area would have remained familiar from the Early Neolithic (Bradley 1991) and the processions through the Clyde Valley and the monuments created therein reflect already established routeways.

Upland settlements have been interpreted as temporary accommodation for seasonal subsistence tasks including upland pastoralism (Halliday 1985: 234; Pope 2015: 4). The droving of animals and movement of people to their seasonal settlements would have followed a long tradition of similar routes. It is likely that for Bronze Age people, place was multi-nodal which in this case is interpreted to mean that there were different areas of settlement (presumably at least one upland and one lowland) at either end of well-worn routes linking them. The settlements would have been focal points destinations occupied during certain times of the year (Illus 7.4). It is possible that in the Middle Bronze Age the proportions of pastoral and arable farming practiced by different communities may have varied according to their locations, and the routeways between them were maintained by social and trade networks with goods, as well as people and animals moving between permanently occupied settlements.

There is a change which takes place over millennia in the perception of the landscape from the curation of the land towards a wish to exploit and control it. This change is probably complete by the time of the Iron Age. The remains of the platform settlements



Illus 7.4 Midlock Valley during the Middle Bronze Age. (© Headland Archaeology (UK) Ltd)

formed part of the world of the Midlock Valley's Iron Age occupants, but they appear to have avoided the slopes as places to construct houses. They may have created their world with reference to the past but were they respecting the Bronze Age platform settlements or ignoring them? Although at Bodsberry UPS one of the platforms was reoccupied in the Iron Age (Terry 1995), the evidence of Midlock Valley suggests that by avoiding reuse of the platforms they were not using the remains of the Bronze Age inhabitants' structures to legitimise their presence in the valley.

As farming grew more intensive it required more land management and social organisation and a stronger communal identity developed (Lelong & MacGregor 2008: 247). These communal identities were expressed to outsiders, as well as to members of the community through the construction of the enclosures in certain locations. If this organised economy still required the droving of animals along ancient routeways in the Upper Clyde Valley (Mercer 2018: 198) negotiation between the different communities over access and possibly trade would have been required. The upstanding remains of hillforts and the enclosures identified through aerial photos are the most visible aspects of the Iron Age. Unenclosed Iron Age settlements such as the roundhouse in Midlock Valley are often inadvertently discovered through excavation, and the nature of the relationship between unenclosed and enclosed is difficult to assess (Haselgrove & McCullough 2000: 77). It is possible to imagine that the occupants of the roundhouse in Midlock Valley were subservient to those who controlled access to the enclosures and hillforts of the Clyde Valley; perhaps the husbandry of livestock was their contribution to the community resource.

The Southern Upland landscape visible today contains upstanding remains on the slopes and ridgelines of the valleys that take the form of features relating to the hill farming economy, such as buchts and other sheepfolds, boundary structures such as turf banks, and cultivation areas - evidence of a recurring sequence of agricultural practices. With some exceptions (for example, Glenochar 7.7km southwest of Midlock) the medieval countryside is subsumed beneath a pattern of evidence no earlier than 18th century in date. The presumption about the extent and distribution of medieval settlement is often based on 'drawing back' evidence from the post medieval period, since the archaeological excavation of rural medieval sites is, if not rare, at least not common. The presence of medieval remains on the southern slopes of Midlock Valley is a significant discovery and shows that there is potential for such remains to exist sub-surface wherever ploughing has disturbed the upper profile of the ground (Illus 7.5).



Illus 7.5 Midlock Valley during construction of the cable access route. (© Headland Archaeology (UK) Ltd)

7.5 Lessons from Methodologies

The division of the project landscape into three areas of potential for unrecorded archaeological features was based on general topographic zones - the valley floors, lower slopes, and ridges / hilltops, which came to be defined by altitude. This informed different archaeological strategies requiring different levels of effort, for example evaluation and excavation for valley floors, watching briefs on lower slopes, and occasional monitoring on ridgelines. It must be admitted that there was a hint of environmental altitudinal determinism in this approach. The presence of a Mesolithic pit at an altitude of 426m in Camps Valley was unexpected, and investigations at other subsequent wind farms have noted the presence of settlement remains at high altitude (for example Griffin Wind Farm, Perthshire; Bailey 2014). In particular areas of the project the generalised zones were subject to modification, with part of Camps Valley being redefined from Zone 2 to 1 and part of the Woodend area redefined from Zone 3 to 2, both on the basis of known heritage assets in the vicinities. The discovery of features at unexpectedly high altitudes during works for the initial wind farm construction also impacted on the defined limits of those zones for the wind farm extension.

There is little doubt that not implementing a uniform programme of direct monitoring will mean there is a risk of loss of evidence. However, on the strength of the number of features recorded at higher altitudes in the course of the project the likelihood that there have been any substantial losses is still considered small. The flexible strategy adopted for this project appears to have been broadly successful and the effort required to provide blanket monitoring must be balanced with the value of the evidence resulting from it. In future, the parameters for defining the zones could include more than the altitude and general topographic zones, taking into account variations such as steepness of slope, proximity to watercourses, and possibly soil type, as well as the known heritage assets. Parameters could be set differently according to the individual merits of the valleys within the landscape and could be adapted as the works progress and archaeological discoveries are made. Certainly, methods which allow feedback throughout the life of a project such as this (which had a duration of over five years in terms of archaeological site works) are vital to allow a full understanding of the potential of the area being developed.

The main method of establishing the presence, extent, and character of archaeological deposits on construction projects is by trial trenching. The assessment of the trial trenching results then informs decisions regarding the resources and timescales required for the mitigation of damage to the archaeological resource through open area excavation. The sites at Woodend, Newton Plantation, and the Iron Age settlement in Midlock Valley, were all initially identified through trial trenching (though the existence of Woodend was known from aerial photographs). Trial trenching was not used on the northern slope of Midlock Valley as the proximity to the Scheduled Monument and some non-scheduled upstanding remains meant that archaeological remains were expected.

Trial trenching was used on the planned route of the access road in Camps Valley (Illus 7.6). Here it was ineffective in establishing the extent and character of the archaeology – none of the features on the upper slopes of the south side of the valley were identified during trial trenching, for example. Managing to pick up discrete pit features on an extensive hillside is something of a needle-in-ahaystack type challenge. Flexible approaches and the adaptation of existing strategies were vital in order to make a more productive use of resources and a key element in this adaptability was the role of the Archaeological Clerk of Works.

The Clyde Wind Farm was one of the first construction projects in the UK to specify the role of an Archaeological Clerk of Works in a planning condition. The role of Clerk of Works is a familiar one in the construction industry; Clerks of Works were employed by the Architects and Engineering Departments of local authorities and among other things ensured quality of construction standards and compliance with building regulation statutes. With changes since the 1990s in the manner of construction contracts, due in part to the introduction of compulsory competitive tendering and other rationalisations, the role of Clerk of Works has become one of independent assessment of on-site works protecting the clients' interests during the construction process. The definition of the Archaeological Clerk of Works included many of the attributes expected, such as anticipating, interpreting, advising, and guiding, in order to help reduce the risk of both damage to the archaeological resource and delay to the construction programme. Clearly the archaeological advisors to the local authority were where the buck stopped for the methodology, but the responsibility for the implementation of the Archaeological Programme



Illus 7.6 A trial trench on the southern side of Camps Valley. (© Headland Archaeology (UK) Ltd)

of Works fell on the ACoW's shoulders, where they had to 'translate' complex archaeological issues into comprehensible language for the project designers and equally, explain complex design challenges to the archaeological advisors. The successful delivery of the archaeological element to the project is in part down to the experience and knowledge of the individuals who took on the role along with the archaeological advisors.

Infrastructure projects with linear elements, such as road schemes, pipelines, and wind farms (Illus 7.7), offer opportunities for archaeologists to approach the landscape as a whole. In particular wind farms offer the archaeologist one of only a few opportunities to monitor transects across upland valleys from ridgeline to ridgeline. These transects are determined by the construction design for the project and not by the particular (peculiar) interests of the archaeologist, and as such should be seen as a randomised sampling of the landscape. In contrast to many of the archaeological reports consulted by the authors for this publication which are the result of excavations targeted on visible monuments, monitoring of the transects for this project has led to areas being investigated that would not normally be selected for archaeological examination. This has enabled archaeologists to test the incidence of archaeological features in the landscape. For example, one of the significant discoveries of this project was the ability to see the Neolithic pits in their landscape setting and to note their absence in other settings thanks to these transects. The upland areas favoured by wind farms may previously have been considered to be devoid of subsurface archaeology, but this project has shown that such broad generalisations are not adequate. The archaeological knowledge generated by the investigations such as this one can make a significant contribution to the history of the area.

It should be noted that the excavation (unintentionally) provided the opportunity to look at one of the common methods of installing cables



Illus 7.7 Excavating access road Zone 3. (© Headland Archaeology (UK) Ltd)

in an upland context – the ploughing of cables into the ground - and the resulting impacts on buried archaeology. Following initial excavation of the platform settlement on the northern slopes of Midlock Valley to clear a route for the cable installation, the construction team installing the cables strayed outwith the marked route. Perceptions about the impact of ploughing cables into the ground might be that it causes minimal damage, with the final pipe location only resulting in a line of damage c 0.25m wide at the very most, and even that was not damage which would impact on the survival of the archaeology; this is certainly the case within the construction community (K Dingwall, pers comm). It was established after investigation of the extent of the damage caused by ploughing the cables into areas not previously cleared of archaeology that instead of a narrow channel of disturbance, a corridor c 1m wide was affected. The blades attached to the plough (which enable it to maintain a constant depth within the natural subsoil) cause vibration in any deposits above, which affects their stratigraphic integrity and make them impossible to interpret. In practice, the ploughed cables appeared as a narrow line of topsoil (where the topsoil had been pulled down from above) within a channel of what looked like redeposited natural about 1m wide. Any features in the path of the plough were effectively erased. These observations have implications for future archaeological strategies with regard to cable ploughing.

7.6 Conclusion

People have made journeys through and to the landscapes of Upper Clydesdale for millennia and over the long periods of time the purpose of their journeys has changed. Generations of people have lived in the valleys and have had to provide food and shelter and spiritual well-being for themselves and their communities; from the mobile hunter-gatherers and early farmers who moved through the valleys and hills to hunt and camp and who viewed the hills and valleys as places of significance containing perhaps ancestral energies, to the later farmers who drove their animals through the valleys to find fresh pasture, to the armies who traversed the valleys and the locals who made accommodations with them. Modern day travellers can glimpse the towers of the turbines and spinning blades (expressions of current environmental energy concerns) on the hills as they follow in the footsteps of those who travelling at a much slower pace saw their landscape in very different ways.

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