

DUNSTANBURGH CASTLE, NORTHUMBERLAND ARCHAEOLOGICAL, ARCHITECTURAL AND HISTORICAL INVESTIGATIONS

Al Oswald, Jeremy Ashbee, Katrina Porteous and Jacqui Huntley



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**Dunstanburgh Castle, Northumberland:
archaeological, architectural and historical
investigations**

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KEY TO EXTRACTS FROM ENGLISH HERITAGE PLAN AT 1:1 000 SCALE

NATURAL FEATURES

-  basalt outcrop
-  rock faces and individual boulders
-  basalt boulder spread
-  natural steep slope
-  mean high tide
-  mean low tide
-  standing fresh water (in November 2003)
-  stream
-  gorse (in November 2003)
-  burnt gorse
-  rushes

ARCHAEOLOGICAL FEATURES

-  upstanding medieval walls and selected paved surfaces
-  facing of medieval foundations (not upstanding)
-  facing of quay structures (individual stones shown)
-  post medieval walls and facing stones
-  artificial earthworks
-  agricultural earthworks (lynchets, headlands, clearance)
-  broad ridge and furrow (furrow shown)
-  narrow ridge and furrow (furrow shown)
-  field number, as referred to in report
-  inferred medieval water features
-  quarried rock face
-  post medieval drainage ditches and limit of upcast spoil
-  flint flake

SECOND WORLD WAR FEATURES

-  pillbox
-  weapons pit
-  anti-tank ditch
-  hollow resulting from extraction of anti-personel mine
-  .303 shell cases

MODERN FEATURES

-  footbridge
-  manhole access to conduit
-  footpath or track
-  fence
-  current edge of erosion
-  fragments of wrecked trawler
-  1930 excavation trenches
-  possible spoil from 1930 clearance work
-  extent of 1989 geophysical surveys
-  +3 location of 2003-5 environmental sample

Dunstanburgh Castle, Northumberland: archaeological, architectural and historical investigations

Al Oswald, Jeremy Ashbee, Katrina Porteous and Jacqui Huntley

Summary

Construction of Dunstanburgh Castle, in Northumberland, was begun in 1313 by Thomas Earl of Lancaster (c1278-1322) and probably more or less completed by the time of his execution in 1322. It was extensively modified in the 1380s by John of Gaunt, Duke of Lancaster (1340-99).

Between November 2003 and May 2006, English Heritage carried out a programme of archaeological, architectural and historical investigations into the castle and its environs. Initially, an analytical field survey identified a spectrum of historic remains: a Bronze Age barrow, a possible Iron Age rampart, a stone quay probably contemporary with the castle, post-medieval settlements, Second World War anti-invasion defences and the wreck of a Cold War 'spy trawler'. Most importantly, perhaps, the survey revealed that an outlying stretch of moat, whose construction is documented in accounts of 1313, must have formed part of a chain of three freshwater meres, where the ground remains boggy today in every case. The southern mere has traditionally been believed to be the site of the castle's silted harbour. Together with a rampart, these formed an outermost perimeter, apparently with a principal gateway on the west, facing towards the village of Embleton, the administrative centre and chief settlement of the barony. In purpose, the meres were partly defensive, partly larders for fish and wildfowl, but perhaps primarily ornamental. Coring in the northern mere has shed new light on local environmental conditions, a record potentially spanning several thousand years.

Fresh analysis of the buildings, especially the massive and extraordinary gatehouse, which exhibits architectural references to the Welsh castles of Edward I (1272-1307), indicates a similar grandeur of design to that suggested by the field survey. New interpretations of the extent and sequence of John of Gaunt's modifications can now be proposed, based on examination of the physical remains.

Re-examination of the unpublished records and artifacts from early 20th-century excavations has put the finds into context. In the light of the findings of the field surveys, the documentary evidence for the development of the castle has been re-assessed. During the fieldwork, the opportunity was taken to gather the personal recollections of local people, particularly about the use of the area during the Second World War. This augmented research undertaken previously by local resident Katrina Porteous into the folklore and literature surrounding Dunstanburgh, notably the story of Sir Guy the Seeker.

Taken as a whole, the new research suggests that Lancaster was seeking primarily to create a 'show castle', perhaps incorporating symbolic references drawn from Arthurian mythology, above all to signify his opposition to Edward II (1307-1327).

1. INTRODUCTION

Between 2003 and 2006, English Heritage carried out a multi-disciplinary investigation of Dunstanburgh Castle and its environs, in Northumberland. The castle occupies a remote and dramatic coastal headland 3kms east-south-east of the village of Embleton and 2kms north of Craster, formerly supported almost entirely by a thriving fishing industry (Figures 1 and 2). The coastal strip, including the site of the castle, is owned by the National Trust, but the ruins have been managed in state guardianship by English Heritage and its predecessors since 1930. The two organisations therefore jointly funded the new research and worked in partnership throughout the project. The castle is a Scheduled Ancient Monument and a Grade I Listed Building, and lies within the Northumberland Coast Area of Outstanding Natural Beauty (AONB), which is a Site of Special Scientific Interest (SSSI). Within this wider area, the boggy ground to the south-west of the castle, which provides a habitat for birds and amphibians, is considered by the National Trust to be particularly important in a local context.

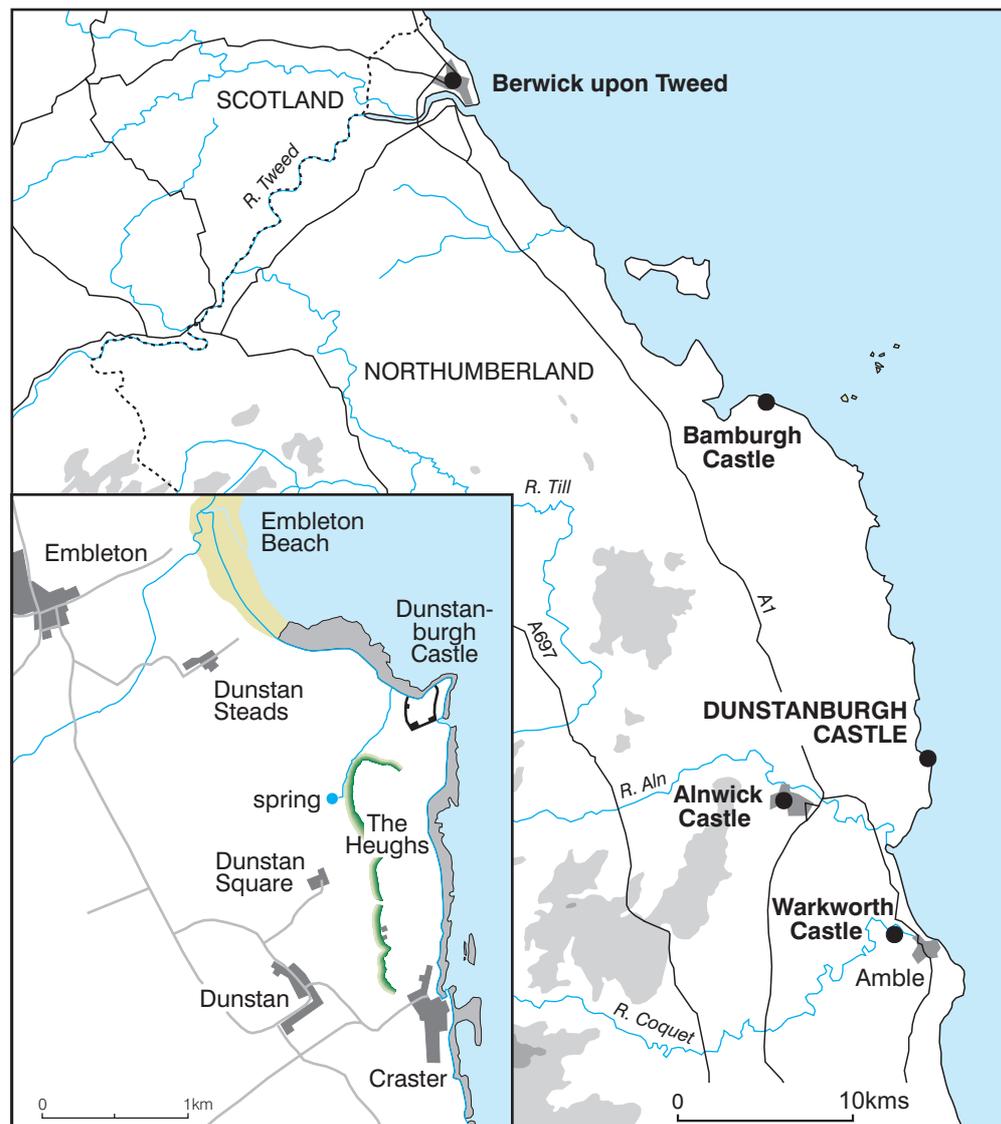


Figure 1.
Location map

The main component of the archaeological investigation, largely completed in November 2003, was a detailed analysis and field survey of the earthworks and other remains visible on the surface in the environs of the castle. The survey, which covered an area of 36 hectares (90 acres), was carried out in detail (at Level 3 standard as defined in RCHME 1999, 3-4) and resulted in a digital plan of the area, suitable for reproduction at a scale of 1:1 000. The investigation thus extended well beyond the limits of the Scheduled Area at the time of the survey; the new findings should lead to the revision of the protected area. A more or less equivalent area had been the subject of exemplary aerial photographic recording by independent archaeologist Tim Gates shortly before the start of the field investigation, on 4th August 2003 (Figure 3). The analytical field survey revealed a broad spectrum of historic remains, spanning the early Bronze Age to the present and described in Sections 7 to 10. A Second World War 'Chain Home Low' radar station (more properly RDF, or Radio Detection and Direction Finding) just north of Craster was singled out for investigation in its own right, at the request of the National Trust (Hunt and Ainsworth 2006). As a parallel exercise, English Heritage carried out palaeoenvironmental sampling, by coring, across an expanse of low-lying ground to the west of the castle (Section 3). This ground remains fairly waterlogged despite several concerted attempts at drainage in the post-medieval period. Although the primary contribution of this work was to the understanding of local vegetation patterns and land-use potentially over several thousand years, some of the findings were of direct relevance to the interpretation of the castle.

In the light of the findings of the field survey, fresh analysis of specific aspects of the standing ruins of the castle was undertaken, principally to address the following issues: the form of the gatehouse when first constructed, particularly the configuration of its roof and the upper levels of its turrets; the function of its rooms; the date and configuration of the barbican whose footings survive immediately in front of the gate; and the extent and implications of the changes carried out for John of Gaunt in the 1380s. This study in turn prompted a more detailed re-examination of past research (Section 4) and a review of the documentary evidence for the history of the castle (Section 5).

While the archaeological fieldwork was in progress, the opportunity was taken to gather and record the personal recollections of local people about the area, particularly during the Second World War. This line of enquiry revealed a wealth of undocumented stories, some



*Figure 2.
General view of
Dunstanburgh from
the west*

of which are relevant to the interpretation of the landscape around the castle. The English Heritage exercise augmented a more thorough piece of research carried out in the 1970s by local resident, poet and historian Katrina Porteous. Her work, which focused on Dunstanburgh's role in folklore and post-medieval literature, is published for the first time in this report (Section 6).

Geophysical survey was scheduled to take place in 2004 to examine three separate targets, namely: the supposed site of the western gatehouse on the outermost perimeter; a series of earthworks apparently representing the sites of buildings immediately behind the western curtain wall; an area in front of the gatehouse where there was potential for the survival of buried remains of a medieval planned settlement. Regrettably, this survey unavoidably had to be indefinitely postponed due to illness. This undoubtedly remains the next logical step in terms of future research and could potentially be followed by trial excavation. The usefulness of radiocarbon dating the palaeoenvironmental samples is discussed in Section 3. The new research also highlighted further analysis and detailed survey of key components of the standing remains, particularly Thomas of Lancaster's gatehouse, as an appropriate next step.



*Figure 3.
Aerial photograph of
Dunstanburgh
and its environs
by Tim Gates
(©Tim Gates 2006)*

2. GEOLOGY, TOPOGRAPHY AND MODERN LAND USE

The natural topography of the headland was a key factor in influencing Dunstanburgh's plan and the form of its defences. The opportunities afforded by the wider terrain for the creation of a 'designed landscape' on the grand scale must arguably also have been of importance in influencing Thomas of Lancaster's decision to expend effort on such a lavish scale here and perhaps his decision to establish a major castle in the barony of Embleton at all. By the same token, the generally inhospitable nature of the headland and, specifically, the lack of any decent natural harbour on the rocky seashore probably played an equally important role in the fairly swift decline in the occupation of the site and its eventual abandonment.

The outcrop occupied by the castle, whose northern side is truncated by the impressive sea-cliff known as Gull Crag, represents the northernmost segment of this part of the Great Whin Sill. In terms of geology and topography, the location has much in common with Bamburgh Castle, which occupies another segment of the Sill on the coast 15kms to the north. The Sill is a dyke of igneous quartz-doleritic black basalt, considered to be of Late Carboniferous age (295±6 million years old), which intrudes into older sedimentary geology, of which limestone and sandstone are the main components (Institute of Geological Sciences 1971). The steep slope that defines the western side of the castle outcrop is effectively a continuation of the landward-facing cliff that characterises the rest of this section of the Sill. The gentle slope to the sea on the south-east of the castle also extends southwards as far as Craster. All along its length, the Sill is interrupted at by defiles of varying width, which in many cases offer natural passages through the formidable barrier formed by the cliff.

The foot of the eminence on which the castle sits is separated from the hinterland by an expanse of low-lying and virtually level ground, varying in width from only 20m to almost 200m. The narrowest part of this, to the south-west of the castle, is formed by one of the defiles. The low-lying ground, which for the most part remains boggy despite several determined attempts at drainage in the post-medieval period, facilitated the creation in 1313 of three freshwater meres linked by a moat, as discussed in Section 8.7. Today, the National Trust encourages the retention of water in much of the low-lying ground (specifically, the sites of the bodies of water termed the West and South Meres in this report) in order to provide a habitat for amphibians and birds.

The black basalt in places takes the form of vertical stacks of tabular blocks, often hexagonal in section. Immediately below the outer face of the Lilburn Tower, a number of these stacks have been retained, apparently to achieve an architectural effect, as described in Section 8.4.2. Near-vertical shafts through the rock also exist. Of these, the Rumble Churn, named for the sound made by waves crashing into it, is the most obvious example, though the sea has now partly destroyed the shaft. A similar shaft through the basalt may have allowed the creation of the 16m-deep well within the inner ward and the 3m-deep underground chamber beneath the western 'porter's lodge', both of which would have required extraordinary effort to construct if they were entirely artificial. The presence within the basalt of clear, crystal-

like formations, known since at least the late-17th century as 'Dunstanburgh diamonds', has been incorporated into local folklore (Gibson 1695, 873; see also Section 6.1). The hard basalt, which fractures irregularly, was used for specific purposes in the construction of the castle. Rounded basalt pebbles from the beach were used as cobbles on the approach to two of the gateways through the newly discovered outer perimeter and on the small surviving fragment of the paved surface of the quay, though none of this cobbling is indisputably medieval. Angular fragments of the basalt predominate in the rubble used to form the core of the western and southern curtain walls. Only along the less accessible eastern wall, which is constructed mainly of small limestone blocks, was basalt used, in places, to construct the outer face. The stone was also used to raise the eastern curtain wall by infilling the original wall-walk, probably in the late 1450s.

A fine-grained local sandstone, varying from golden to deep pink in colour, was used to build the façades of the south and west curtain walls and all the more ornate architectural elements. Thin horizontal bands of sandstone are exposed at certain points in the landward-facing cliff of the Great Whin Sill, notably where quarries have been worked into the basalt cliff face. It is probably the same band of stone, exposed by sea action, which makes up the striking buckled formation just to the north of the castle. In passing, it is worth noting that while this is called 'Greymare Rock' on all historic Ordnance Survey maps, research by Katrina Porteous records that it is called 'Saddle Rock' by most local people, while fishermen refer to it as 'The Whale's Belly'. Visual inspection of the sandstone used in the construction of the castle suggests that it is closest in colour and texture to the much thicker and more accessible outcrops in the vicinity of Howick Seahouses, described in Section 8.11.

The basalt escarpment is covered by a thin soil, which today supports rough pasture for sheep and cattle. Geophysical survey in 1989 showed that within the western part of the outer ward, the soil is c.0.5m deep, with patches greater than 3.5m, partly comprising archaeological deposits, in the area immediately north of John of Gaunt's gateway (Titman 1989). The outer ward is currently mown annually rather than grazed, to provide a habitat for nesting birds. However, evidence for medieval and/or later arable agriculture, in the form of ridge and furrow, is present all along the Great Whin Sill between Craster and Dunstanburgh, including the outer ward and the top of the escarpment, where the rock lies immediately below the turf. Certain areas were returned to arable cultivation during and immediately after the Second World War, but were subsequently allowed to revert to pasture under the influence of the National Trust. Examination of aerial photographs, starting with those taken by the RAF in 1946, shows that with the decline in the intensive grazing over the second half of the 20th century, gorse has gradually encroached into the pasture, particularly along the top of the escarpment (RAF 1946). Modern land-use in the gently undulating farmland to the west of the Great Whin Sill is a mixture of arable and pastoral. Here, too, most of the fields that are under pasture today, as well as the land to the north which has been occupied by Dunstanburgh Golf Course since 1900, retain traces of ridge and furrow. The only field currently under arable in the vicinity of the castle surrounds an isolated basalt outcrop, around which an S-shaped strip of ground has been left unploughed. This feature, known locally as The Key, has been woven into local folklore (see Section 6.2).

3. PALAEOENVIRONMENTAL SAMPLING

by Jacqui Huntley

Initial reconnaissance in July 2003 confirmed that organic deposits, in which pollen was almost certain to be well preserved, survived in the low-lying and boggy ground surrounding the castle headland. On this occasion, a gouge auger sample, taken from the bottom of the broad post-medieval drainage ditch running east to west across the area called the North Mere in this report, demonstrated that 80-90cm of peaty organic material overlay at least 20cm of fine grey-brown, probably waterlain, silty clay. Leaf material from monocot species (sedges, cotton grass, reeds) was obvious in the organic material. In the West Mere, a second sample demonstrated the presence of similar fine grey-brown clay 20cm down, with a wet, mineral-rich sediment above. No strict peat was present. From the general lie of the land, it was presumed that the grey-brown clay seen in the cores was probably from the same stratigraphic layer and that it could have been lain down by freshwater streams feeding into the area from further inland. No augering was carried out in the South Mere, which lies within the bounds of the Scheduled Monument.

The main programme of coring was carried out in November 2003 and October 2004, with the primary aim of determining the shape of the basin that once held the North Mere, as well, perhaps, as the West Mere, and the nature of the stratigraphy there. Secondary aims were to determine the potential for further environmental work, principally pollen analysis, and whether material suitable for radiocarbon dating survived. Twenty cores were taken in the North Mere (as shown on Figure 4 and detailed in Appendix 1), with a further two in the West Mere and one in the intervening ground.

None of the samples contains any obvious layer of marine clay, indicating that the sea has not entered the North or West Meres for several thousand years. Up to 4m of peat survive, so there is potential to address questions relating to the landscape and its possible use and manipulation over a long timespan. The shells present in several of the cores are most like small freshwater types. The northern end of the North Mere has deeper sequences, which are more typical of waterlain deposits at the bottom of the sequences. Over this, there are monocot-rich peats, although these are not present in the most southerly cores. Wood peat, retaining twigs and small pieces of roundwood, forms the upper limits and is most common on the landward side. The suggestion is that the area contained a body of fresh water that filled in during a normal hydroseral succession until woodland had become established at least around the edges.

Dating this material is crucial to understand what further questions may be addressed by future pollen analysis. With up to 4m of peat, the deposits may well span 4,000 years. With up to a metre of soil and clays overlying the peat in some cores, it may be that the peat deposits represent material more than some hundreds or even some thousands of years old. In other words, without further work, it is impossible to tell whether the deposits relate to medieval water management (see Section 8.7), or a much earlier landscape. The absence

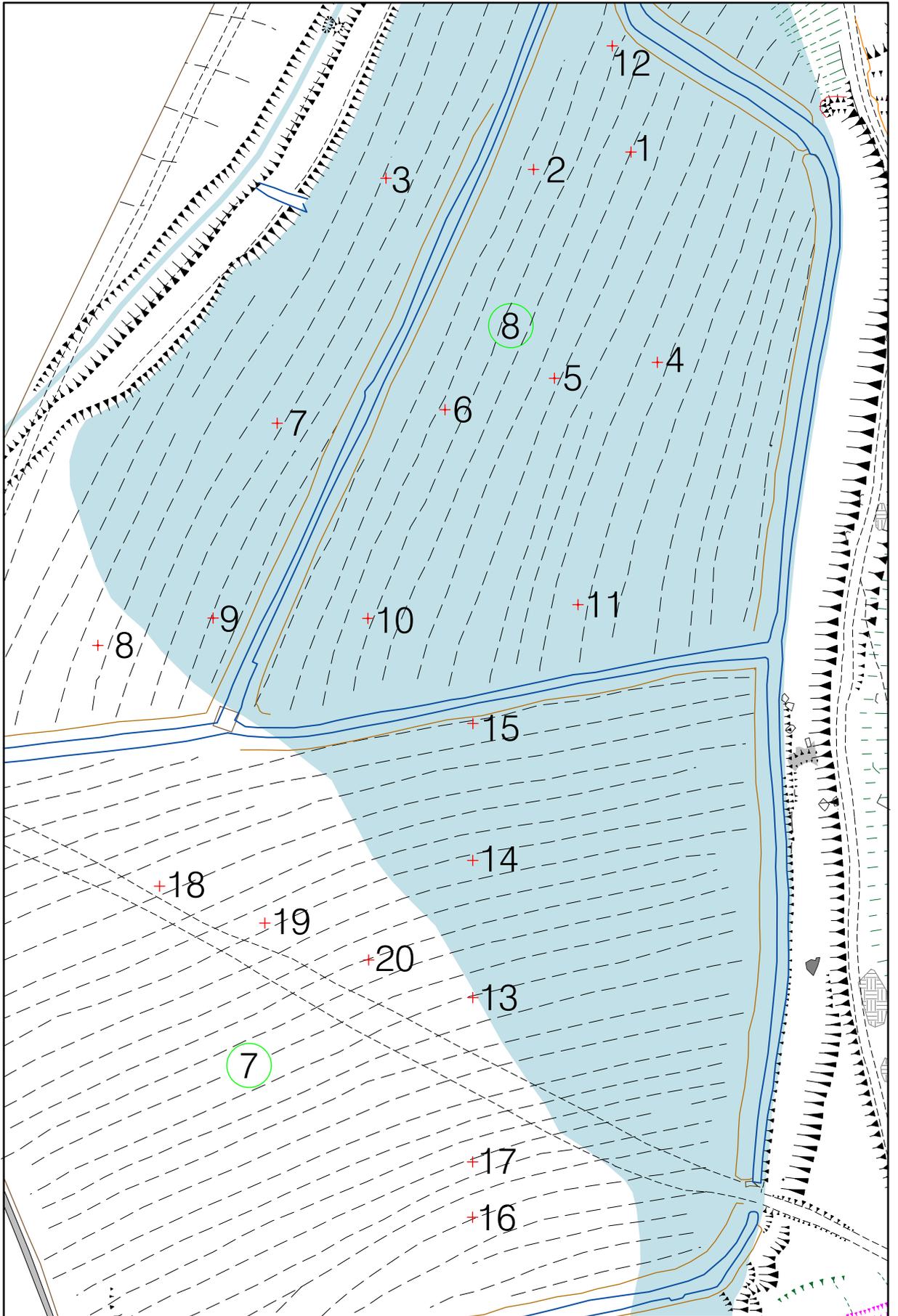


Figure 4. Locations of environmental samples taken by coring in the North Mere (1:1 000 scale)

of peat from any of the small number of cores taken in the West Mere may well support the latter theory. Clearly, pollen itself will not date the deposits, but suitable organic material does survive for radiocarbon dating, at least in the area of the North Mere. Two dates are required: one from the lowermost woody peats and the other from as high in the organic sequence as feasible.

Whilst the area investigated seems to be represent an enclosed hydrosere there may be other organic deposits to the south and east, where investigation was limited. These areas would benefit from similar examination. Besides pollen, it would be useful to investigate the potential for diatom analyses. These organisms have quite specific water chemistry requirements and would help to determine whether the water was marine, brackish or fresh at different times. Pollen evidence has been used to address similar questions nearby at Druridge Bay (Innes and Frank 1988).

4. HISTORY OF RESEARCH

Serious antiquarian interest in Dunstanburgh could be said to begin with the view engraved by Francis Place in 1678 (Figure 5). Although Place characteristically exaggerates the height of the headland, there seems little reason to doubt the accuracy of his depiction of the castle and surrounding field pattern, which is demonstrably reliable in several respects.

Figure 5.
Drawing of
Dunstanburgh Castle
by Francis Place,
dated 1678
(reproduced by
permission of
The British Library)



The engraving made by Samuel and Nathaniel Buck in 1720, also published in *England Display'd* in 1769, is more problematic (Russell and Price 1769). It has a number of errors, of which the most serious is the fact that, presumably to fit within the confines of the page width, the south curtain wall is set westward and southward of its true position, so that it terminates awkwardly in front of the gatehouse. This has the effect of making Thomas of Lancaster's gatehouse seem, to some extent, a more conventional free-standing keep set behind the south curtain wall. The engraving contained in Francis Grose's *Antiquities of England and Wales*, made in December 1773 is much truer to reality (Grose 1787). The engraving and description produced by Hutchinson in 1776 are also of use (Hutchinson 1778).

The nature of the antiquarian interest shown in Dunstanburgh in the mid-19th century (before 1884) is bound up with the difficult question of how much restoration work was carried out without full recording, as discussed more fully in Section 8.1.6. A number sketches survive in the British Library and the County Record Office which may be associated with the supposed episode of restoration, but their interpretation, in terms of understanding both the castle's fabric and the history of archaeological intervention, is hampered by the fact that none of the depictions can be reliably dated. In 1884, however, the front of the great gatehouse was photographed at close range by JW Robinson; it can be inferred from features visible on this photograph that some restoration work had already been undertaken (Figure 6). This image was reproduced seven years later in the comprehensive work of scholarship into the Border strongholds of Northumberland produced by the historian Cadwallader Bates, which occupied a full volume of *Archaeologia Aeliana* and was subsequently partially reproduced in a county history (Bates 1891, 167-94; 1895). The date of the photograph apparently corresponds to the date when Bates began his fieldwork at Dunstanburgh, for by August 1885 the 'rough notes' he recited to visiting members of the Society of Antiquaries of Newcastle already resembled the polished prose eventually published in 1891. The notes were also



*Figure 6.
Photograph of the
great gatehouse by
JW Robinson,
dated 1884
(reproduced by
permission of
Philip Dixon)*

accompanied by a second photograph by JW Robinson, this one a longer view from the south-west (Society of Antiquaries of Newcastle 1885-6, 73-83).

In 1893, the local architect Charles Hodges, apparently commissioned by the then owner of the castle, Sir Arthur Munro Sutherland, made a large scale plan which shows how much of the masonry was exposed prior to the 20th-century excavations and restoration (Hodges 1893 and Figure 7). Only elements of the building foundations behind the Constable's Tower were visible (the northernmost room is also depicted in the wrong place) and none of the barbican. The First Edition Ordnance Survey map had been surveyed in 1861 at 6-inch scale (1:10 560); the First Edition at 25-inch scale (1:2 500) was surveyed in 1896 (Ordnance Survey 1866; 1897; see also Figure 8).

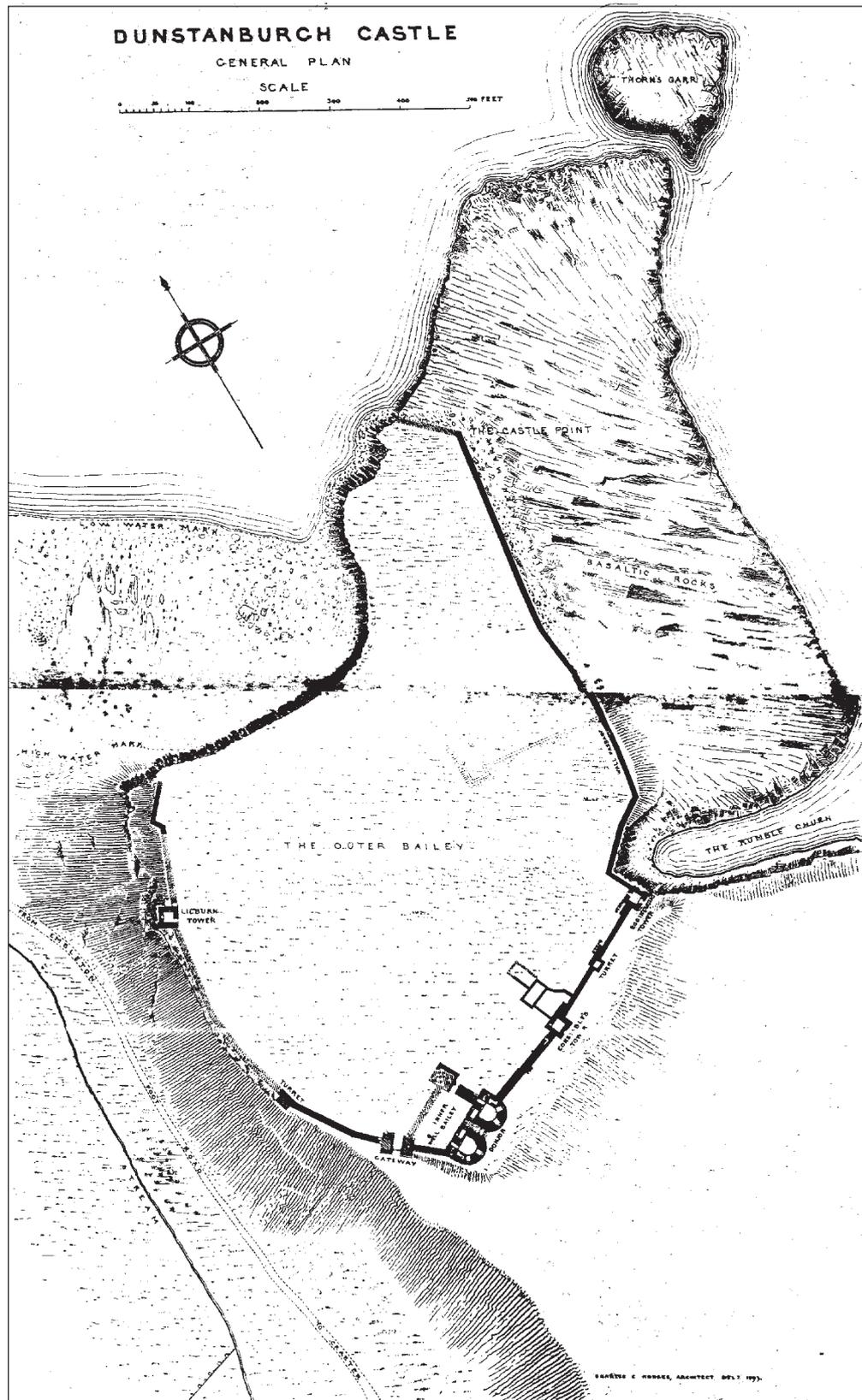


Figure 7.
Plan of the castle
surveyed in 1893 by
Charles Hodges

According to a local newspaper report, an eight-year long campaign of restoration work was completed in March 1930 (Abbott 1930). No detailed account of this work, which seems to have been instigated by Sir Arthur Sutherland in preparation for his bequest of the monument to state guardianship, now survives. The work seems to have included the exposure of the

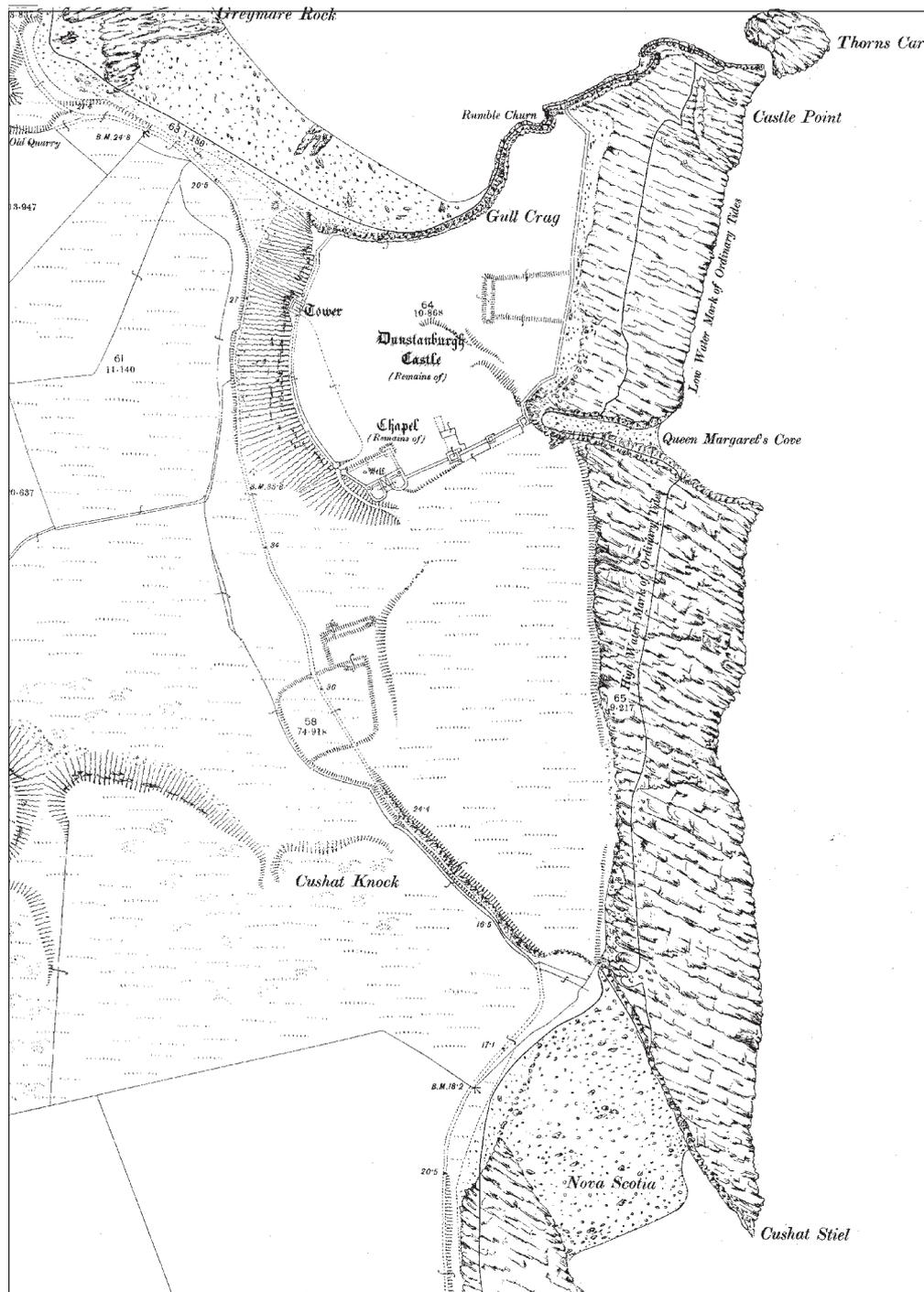


Figure 8.
Extract from
Ordnance Survey
1897 First Edition
25-inch scale map,
surveyed 1896
(reduced from
original scale)

foundations of the west curtain wall where these had been concealed beneath the turf; the clearance of a strip up to about 2.1m wide behind the east curtain wall; the emptying of the rock-cut ditch south of the south curtain wall; and the cleaning out of the well (Bosanquet 1936; unpublished 1930-1). The works foreman, Mr Beveridge, kept basic records of the artefacts he discovered and their findspots. The unpublished notebooks are held in the English Heritage site archive (Bosanquet unpublished 1930-1). This small and reportedly selective collection of finds is important, for it included many artefacts of prehistoric and Roman date: a fragment of early Bronze Age beaker; a *dupondius* coin of Hadrian (AD 117-138); a fragment of *mortarium* (mortar), bearing an inscription and dating to the late-1st

century AD; two fragments of Roman millstones of Andernach lava, probably imported between the 1st and 3rd centuries; three sherds of Roman 'Samian' tableware, or *terra sigillata*; two inscribed and sixteen un-inscribed fragments of Roman lamps; an unspecified quantity of coarser Roman pottery; a gold ear-ring of Roman date; six fragments of armlets, of which one was made of jet, one was yellow glass paste, and four were white glass paste with pink and greenish tinges; two haematite polishing stones; four spindle whorls. Later material included: one fragment of light grey slate marked for a game (reportedly similar to 'Nine Men's Morris'); a medieval bone comb; six stone cannon balls and one iron one; two lead bullets; roofing lead; a stone roof tile; a clay pipe; a half-penny of George I (1714-27) and a penny of George III dating to 1806.

Exposure of the remains of the barbican of the great gatehouse was begun in October 1929 under the direction of HL Honeyman, who went on to write the first guide book to the site with CH Hunter-Blair (Hunter-Blair and Honeyman 1947). To reveal the foundations here, it was necessary to remove 1.2m of overlying material, presumably resulting from the collapse of the adjacent structures. Additional foundations adjoining the rear of the Constable's Tower were exposed.

The find-spot of a Roman 'head-stud' brooch discovered by Mr Beveridge in the 1920s was the starting point for three trenches dug by Robert Bosanquet on behalf of the North of England Excavation Committee in 1930-1 (Bosanquet 1936). Partly because the report on this research was written up after Bosanquet's death and partly because the distinction between the restoration work and the research excavations was not always made explicit, it is not easy to make perfect sense of the brief and incomplete records that survive. For example, the published report states that the brooch was found '46 feet south of the north garderobe and 37 feet from the [east] curtain wall', a point which corresponds to the eastern end of one of the trenches dug in 1931. Yet the unpublished field notebooks held in the English Heritage site archive give the location of the find itself as 44 feet from the garderobe and 4 feet from the curtain wall, which seems more credible, given the nature of clearance work in which Beveridge had been involved. In addition to a large volume of medieval pottery, Bosanquet too unearthed a significant corpus of Roman and 'native' material, including the rim of a jar of late-1st century date; the rim of a 'Samian' bowl (Form 37) dating to around AD 90 and several sherds of pottery of Iron Age appearance sealed beneath a clay hearth. A rim sherd which may have been part of this concentration dates to some time between the 6th century BC and the 2nd century AD (Jobey 1972, 289). To this material can now be added a heavily eroded carved stone re-used in the inner face of the northern mantlet wall, which appears to be part of a Roman tombstone or altar, and was first noticed during the field survey in November 2003.

Bosanquet went on to excavate several trenches within and around the so-called 'grange'. The largest trench also produced a few sherds of prehistoric and Roman material. Another series of trenches was dug to investigate the earthworks between John of Gaunt's gatehouse and the Lilburn Tower. The only find singled out for mention was a finger-impressed sherd which, it was later suggested, could also date as early as the 6th century BC (Jobey 1972,

289). A further ten trenches were excavated in 'blank' areas within the outer bailey, bringing the total to sixteen. The locations and extents of those that are no longer visible on the surface can be calculated from a measured sketch plan, photocopied by Katrina Porteous in the 1980s, the original of which has apparently been lost. Finds recorded from the research excavations and the preceding restoration work, as well as the areas of later archaeological surveys, have been plotted as accurately as possible and are shown on Figure 9.

The Roman artifacts clearly testify to some contemporary activity and it seems to have been believed at an early stage in the excavations, given the broad sea views commanded by the site, that there may have been a Roman military presence on the headland in the mid-2nd century AD (Abbott 1930). In the AD 140s, the Emperor Hadrian's successor, Marcus Antoninus Pius, advanced to the line between the estuaries of the Forth and Clyde and built the so-called Antonine Wall, which remained the northern boundary of the empire for forty years. A chain of signal stations, including the well known examples at Scarborough, Ravenscar and Filey on the North Yorkshire coast, may have extended as far as the supposed naval facility at Tweedmouth, or beyond, so the possibility of a military presence cannot be dismissed, despite the absence of any incontrovertible evidence. However, as a consequence of the Roman advance, imported artifacts circulated fairly freely amongst the native population, so artefacts dating to this period could also be the only readily datable signs of a more long-lived non-military settlement. As both Bosanquet and Jobey pointed out, the few sherds of early Iron Age pottery need not imply continuous occupation of the headland from that date.

Spoil from the excavations was apparently dumped in various places. Local residents recall that an irreparably damaged lorry was pushed over the cliff into Queen Margaret's Cove, while one remembers that rubble was also tipped into the sea there. Other people recall that material was dumped on the Nova Scotia beach, perhaps accounting for the presence above the high water mark of two sandstone window mullions, broken but not eroded. These may have been replacements commissioned for the restoration work, but broken in transit. On the gentle slope to the south of the south curtain wall, the 2003 survey identified around a dozen low, amorphous spreads of material which stratigraphically post-date the narrow ridge and furrow of Field 2. A post-medieval origin for these deposits is certain and their proximity to Thomas of Lancaster's gatehouse suggests that they may represent spoil from the excavations behind the south curtain wall. Immediately to the west of the east curtain wall, a series of small mounds of rubble must represent spoil from the clearance there.

At the foot of the slope that forms the northern end of the castle outcrop, immediately overlooked by the end of the curtain wall, a grassy mound around 2.4m high is reminiscent of a spoil heap, with hints that it was formed by tipping from above. Where erosion has removed the turf, the exposed material seems to be entirely fine soil, without stones. It would be easy to assume that this related to the early 20th-century excavations or restoration work, were it not for the fact that the mound is depicted on the First Edition 25-inch scale map surveyed in 1896 (Ordnance Survey 1897). In the absence of any other convincing explanation for the feature, it may represent the spoil from an undocumented episode of excavation, presumably of the west curtain wall.

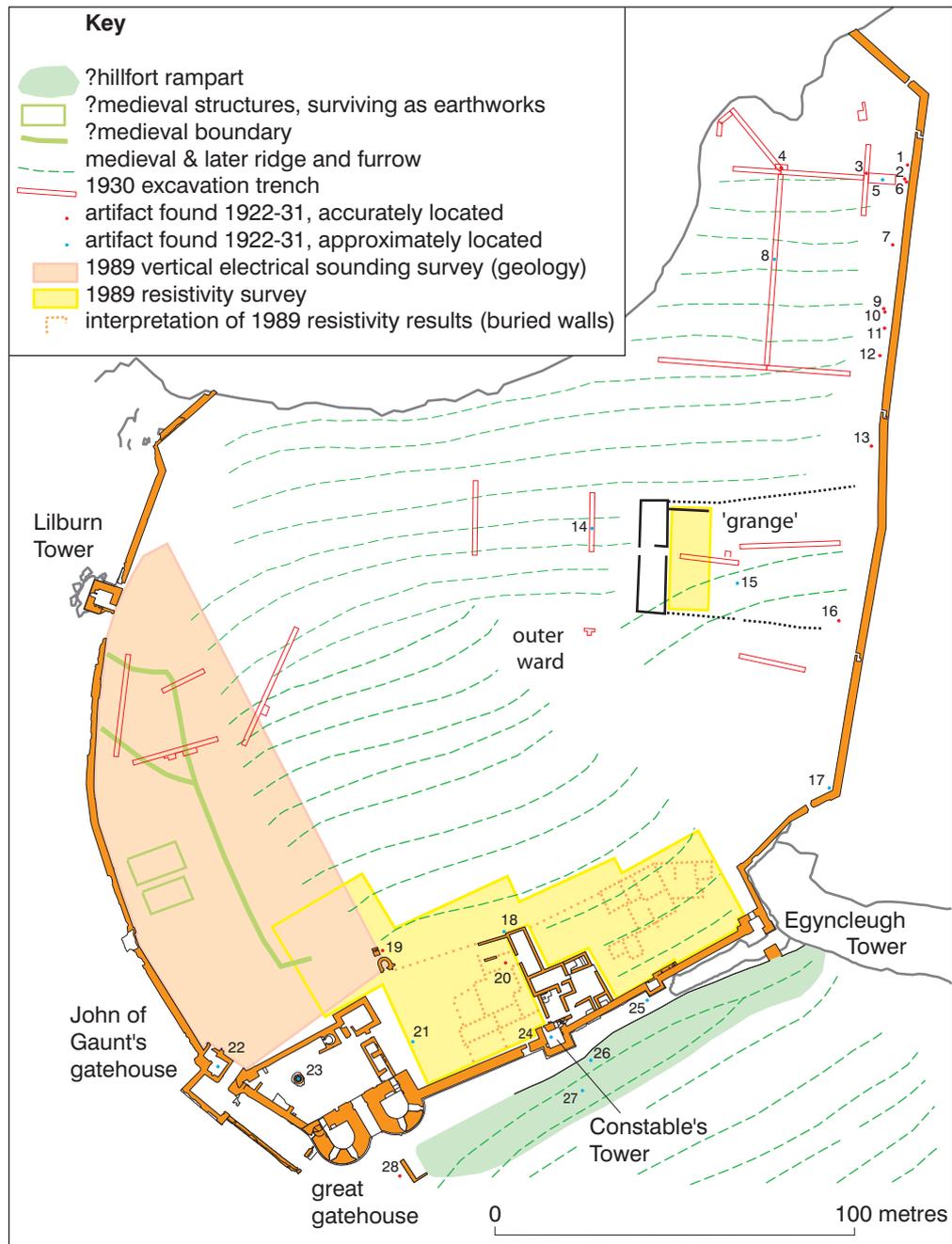


Figure 10. Plan of Dunstanburgh showing the extent of 20th-century archaeological fieldwork

Walter de la Aitchison, a local enthusiast recruited by OGS Crawford in the 1930s to pass on archaeological information to the Ordnance Survey, visited Dunstanburgh in 1951 (NMR a). From what is known of Aitchison's *modus operandi* elsewhere, it is likely that his visit was made to follow up examination of the excellent series of vertical aerial photographs taken by the RAF five years earlier (RAF 1946). He suggested that the earthwork complex on the western slope of the castle outcrop, discussed in Section 9.1, which is very probably a post-medieval shieling, might represent Thomas of Lancaster's attempted 'borough', a siege work or even medieval port installations. Eric Geary of the Ordnance Survey, who followed up Aitchison's visit in March 1955, rightly poured cold water on these speculations and apparently made no comment on the castle itself (NMR a). Aitchison's mention of 'foundations ploughed up in 1949' on the southern slope of the castle outcrop, which Geary was unable to recognize, remains impossible to substantiate and difficult to accept.

Specialist archaeological aerial photography of the castle began with the taking of images by JKJ St Joseph in July 1946 and July 1948 (Cambridge University Committee for Aerial Photography 1946; 1948), and has continued intermittently up to the present.

In 1985-6, Eric Cambridge of Durham University Department of Archaeology directed a survey of the castle's standing masonry, using a combination of photogrammetry and 'Total Station' theodolite, accompanied by transcription and translation of all documents referring to the fabric (Cambridge 1986).

In 1989, students under the direction of Dr Clive Titman carried out a resistivity survey across the area behind the south curtain wall and a VES (Vertical Electrical Sounding) survey covering the area behind the west curtain wall (Titman 1990). On the evidence of the first survey, the buried foundations of a range of rooms and associated walled enclosures were identified adjoining the extant and excavated walls behind the Constable's Tower (see Figure 9). The precise details of the interpretation of the data might seem too optimistic by current standards. The second survey, carried out primarily to test the nature of the geology behind John of Gaunt's gateway with a view to potentially moving the ticket office to that point, showed there to be localised geological and/or archaeological deposits up to 3.5m deep overlying the surface of the basalt. This is also evident from the surface topography.

5. THE DOCUMENTED HISTORY OF THE CASTLE

The documentary evidence for Dunstanburgh has been fairly thoroughly researched and this account presents mainly a synopsis. The history of the site begins in 1313 with the first references to the building of a castle, evidently an entirely new construction. The estate in which it was built, the barony of Embleton, had belonged to the earls of Lancaster since the death of Simon de Montfort at the Battle of Evesham in 1265, and to Earl Thomas since his accession to the title in 1294. It has been suggested that despite its apparently antique name, Dunstanburgh had no history of earlier occupation, unlike nearby Bamburgh Castle, and that the name was a 14th-century concoction, inspired by the name of the nearby village of Dunstan (Summerson 1993, 5). This conclusion may have to be revised in the light of the tentative identification in 2003 of a possible Iron Age rampart almost underlying the castle's south curtain wall, as described in Section 7.1. If the name was genuinely invented, it certainly arose very early in the history of the castle: even in the first accounts for the construction of the site, preserved in the Duchy of Lancaster papers in the Public Record Office, which were enrolled in 1314 but refer to 1313, the site was already known as *Dunstanburghe* or *Donstanburgh* (PRO: DL29/1/3, roll 2; Cambridge 1986).

The circumstances of the castle's establishment arguably relate less to the Scottish border wars than to the internal politics of England, particularly the rebellion of Earl Thomas against the authority of Edward II (1307-1327) and his homosexual lover, Piers Gaveston, Earl of Cornwall (died 1312). As with much else in the history of Dunstanburgh, this point was first made in 1891 by Cadwallader Bates, but has been re-affirmed by more recent historians (Bates 1891, 167-8; 1895, 196-216). Lancaster took the leading role in the opposition party responsible for besieging the king and Gaveston in Scarborough Castle, seizing Gaveston from the safe-conduct of the Earl of Pembroke and ordering his summary execution (on Lancaster's own land). Contemporaries certainly interpreted Edward II's later acts against Earl Thomas as belated revenge for his part in Gaveston's death. However, even without this particular issue, Earl Thomas' resentment against the excesses of royal purveyors and exasperation about the wars with Scotland fuelled the opposition between Earl and King. With an estimated annual income of £11,000, Earl Thomas' personal wealth was second only to that of the king himself, making him a natural figure to head the party in opposition to the King. However, it should be noted that Earl Thomas was not a major landowner in Northumberland: the barony of Embleton represented a geographical outpost of his estates, which were mostly concentrated in the northern Midlands and Yorkshire, including castles at Tutbury, Donington, Leicester, Pickering, Pontefract and Melbourne, as well as Kenilworth. His power in Northumberland has been described as 'shallow', being restricted to a small (and sometimes unreliable) circle of gentry retainers, most of them only recruited in 1317 and later (King 2001).

An account preserved in the Duchy of Lancaster papers in the Public Record Office shows that construction of the castle was under way by May 1313, referring to the excavation of a 'ditch between the site of the castle and the field of Embleton on the west side,' which can

certainly be equated with the earthwork described as the 'moat' in Section 8.7 (PRO: DL29/1/3, roll 2; Cambridge 1986). The castle's buildings were also evidently under construction at the same time, for there are references to purchases of stone and iron (for cramps), Baltic timber for doors and windows, a lodge for the masons, and from the outset, the construction by task-work of a gatehouse. The indenture for this work was ostensibly made directly between the mason, 'Master Elias,' and Earl Thomas, hinting that Thomas was personally involved in the design of the castle. The total value of this account, given at the foot of the roll, was £184 – 5 shillings – ½penny; by Michaelmas 1314 (the end of the first account), £168 – 10 shillings – 3½ pennies had already been spent.

It has been suggested that 'Master Elias' was Elias de Burton, who is apparently mentioned in accounts for the construction of Conwy Castle and town walls (Douglas Simpson 1949, 3; Summerson 1993, 11). Confirmation that the two men were one and the same might support the argument that Dunstanburgh's design referred to the royal castles of North Wales, but at present, the connection must be regarded as unproven. As discussed below, Dunstanburgh does show similarities to some of the royal works of North Wales, particularly Harlech and Beaumaris, but not specifically to Conwy.

After 1313, the progress of the works is imprecisely known. It has been suggested that the right to crenellate, granted by the King on 21 August 1316, may mark the completion of the great gatehouse and it has generally been assumed that the rest of the castle was essentially complete by the time of Lancaster's execution in 1322 (Bates 1891, 171; 1895, 199; Hunter Blair and Honeyman 1936, 6). The writ of appointment of Robert de Bincestre as constable, probably the first constable, in March 1319, may mark the point at which the castle became operational.

In 1322, Thomas of Lancaster was captured by the supporters of Edward II after the battle of Boroughbridge, put on trial in the hall of his own castle at Pontefract (for taking up arms against the king and collusion with the Scots) and summarily beheaded. He had evidently been trying to retreat to Dunstanburgh on the insistence of his supporters, though against his own better judgement: he had feared that making his base in Northumberland would only fuel rumours that he was conspiring with Robert the Bruce (Brie 1906, 217). This is now believed genuinely to have been the case, based partly on the evidence of the seeming immunity of Lancaster's lands from pillage by the Scots. Dunstanburgh Castle was seized by the King and committed to a royal steward in Northumberland, who delivered it forthwith to a keeper, Richard de Emeldon (Embleton). The garrison was 40 men at arms and 40 *hobelars* (lightly-armed horsemen). Constables of Dunstanburgh documented in the 1320s include Roger de Mauduit and John de Lilburn, the latter giving his name to the Lilburn Tower. Both of these men had previously had violent careers, including periods in the affinity of Thomas of Lancaster himself. Under Edward II at least, the castle was perceived as militarily important in the conflict with Scotland: some of its buildings were repaired and its keepers were ordered to put it on a war footing against a Scottish incursion. From 1326 onwards, the castle was nominally the property of Earl Thomas' brother, Henry, who formally inherited the Lancaster estate in the following year.

In the 1350s, repairs were carried out to several of the buildings, including the grange, the hall and the constable's chamber, as well as identifiable buildings such as the Lilburn Tower and the great gatehouse. In 1366, Dunstanburgh and the barony of Embleton became possessions of John of Gaunt, Duke of Lancaster (1340 - 99), through his first wife, Blanche. From 1380, Gaunt was appointed the king's lieutenant in the North, a position which greatly increased his need for a stronghold in Northumberland (particularly in the aftermath of the Peasants' Revolt of 1381, during which he had been forced to seek sanctuary with his rival the Duke of Northumberland). Between October 1380 and July 1383, Gaunt successively ordered master masons John Lewin and Henry Holme to carry out some of the most important alterations in the castle's history; the construction of a stone 'mantlet' or enclosure wall inside the great gatehouse, the addition of stone 'houses' and a new gate connecting this enclosure and the outer ward, and finally a new gatehouse leading through the outer curtain wall into the outer bailey, to the west of Thomas of Lancaster's gatehouse. According to most modern interpretations of the castle's development, the great gatehouse was blocked at this point, effectively becoming a keep, and entrance to the castle was subsequently gained via John of Gaunt's new gatehouse into the outer bailey, then through a second gate (beside the present shop) into the inner enclosure. In 1383, Gaunt also abandoned any ambitions to forming a power base in the North, with the lapse of his commission as lieutenant of the Marches.

From 1399 onwards, following the death of John of Gaunt and the accession of his son to the throne as Henry IV (1399-1415), Dunstanburgh Castle effectively became a possession of the Crown. At least during the first half of the 15th century, attempts were made to keep the castle in repair, with documented works to the 'great gateway' (presumably Thomas of Lancaster's gatehouse) in 1431 and eight years later, extensive works to the hall and great chamber 'in the tower called *dungeour*', probably the same building. The same accounts mention the fitting up of the king's chapel and the furnishing of the chamber of the auditor and receiver, officials for the administration of the barony, by now renamed the lordship of Dunstanburgh. Works continued through the 1440s and 1450s with extensive repairs to the constable's hall and adjoining buildings (but evidently not the great gatehouse), a new barn for the demesne lands, a new tower 'at the entrance to the castle' and other parts of the outer ward, including a new postern near the 'Elgyntour', giving access onto the foreshore. These documents also provide much information concerning other estate buildings, such as dovecotes and mills and the moot hall, all located in the village of Embleton. In passing, it should be noted that the present building named 'The Old Moot Hall' in Embleton dates to the 18th century, although the 'Old Vicarage' and a dovecote in the garden of 'Dovecote Cottage' are of medieval origin.

In the early 1460s, Dunstanburgh Castle became involved in the most serious military action of its history, during the 'Wars of the Roses.' Like Bamburgh, Alnwick and Warkworth, Dunstanburgh acquired great symbolic importance as an indicator of political control over the Eastern March. Initially, the castle was held for the Lancastrians (like Alnwick and Bamburgh) by Sir Ralph Percy (1425-1464), who had apparently served as deputy constable from as early as 1451, being promoted in 1457. Sir Ralph remained loyal to Henry VI (1421-

1471) even after the Yorkist victory at Towton in March of that year, but surrendered Dunstanburgh to the Yorkists in September 1461, only to transfer his allegiance back to Lancaster in October 1462, when the Lancastrian queen Margaret of Anjou (1430-1482) landed at Bamburgh with a small army. This revived Lancastrian ascendancy was brief: Margaret, with Henry VI fled to Scotland at the approach of the Yorkist army of the Earl of Warwick (1428-1471), including the Earl of Worcester, John lord Howard, Ralph lord Greystoke and Sir Thomas Malory (who, perhaps significantly, omitted Dunstanburgh from his great literary work, the *Morte d'Arthur*; see Section 6.1). Besieged by Warwick's army and faced with starvation, Sir Ralph again changed sides to support the Yorkists, only to turn coat a fourth time in March 1463, handing Bamburgh and Dunstanburgh to the French and Scottish army of Margaret of Anjou. The castle was finally and permanently surrendered to the Yorkists only in June 1464. John Gois, the 'capitayne of the castell' was taken to York and there 'wyth a Hatchet behedded' (Society of Antiquaries of Newcastle 1885-6, 77).

From this time on, as with numerous other royal castles, the fabric of Dunstanburgh was allowed to fall into ever greater disrepair and its garrison into lawlessness. Surveys of the castle in 1538 and 1543 describe a site on the verge of abandonment: 'a very ruinous house and of small strength'. By this date, only the donjon (that is, Lancaster's great gatehouse) was habitable and only with difficulty on account of poor leadwork. Repairs never seem to have amounted to much and orders from the reign of Elizabeth I (1557-1603) that the castle be taken in hand seem to have come to little. Research by Mary Craster indicates that her ancestor Alice Craster, on the death of her husband in 1594, moved to Dunstanburgh from her home at Craster Tower and spent the three final years of her life there (information from Craster Living History website). Whichever part of the castle she inhabited (almost certainly the great gatehouse; see Section 8.2) must have provided her with comfortable accommodation, for she was evidently quite wealthy. She farmed the land within and around the castle, keeping 18 plough-oxen, 32 cattle, 3 horses, 145 sheep and 12 pigs. At her death in 1597, her personal possessions were listed as a bed, 2 truckle beds, 2 tables, 2 chairs, 7 stools, 2 benches, a cupboard and a chest; also a silver salt cellar, 6 spoons, 18 pewter vessels, 3 trenchers, kitchen utensils, 2 spinning wheels, bed-linen and table-linen.

In 1604, the castle was sold to Sir Thomas Windebank, Thomas Billott and William Blake, who passed it on to Sir Ralph Grey on 21 November 1605. By the late 17th century, according to a note added to the English translation of Camden's *Britannia*, much of the expanse within the curtain wall was under arable cultivation (Gibson 1695, 873). The castle remained with the Grey family until 1869, when the Earl of Tankerville sold it to the trustees of the late Samuel Eyres of Leeds. From them, it was bought by Sir Arthur Sutherland, who placed it in the guardianship of the state in 1930.

6. DUNSTANBURGH IN FOLKLORE AND LITERATURE

by Katrina Porteous

6.1 The story of Sir Guy the Seeker

One dark and stormy night a lone horseman, Sir Guy, hammers on the door of Dunstanburgh's gatehouse, seeking shelter. He is shown inside by a wizard, who leads him down a staircase cut deep into the rock. There, beneath the castle, he is shown a lady, held captive inside a crystal tomb and guarded by an army of sleeping knights. Sir Guy must rescue her. The wizard offers him a choice, on the one hand a sword, on the other a hunting horn. Sir Guy chooses the horn and blows it for all he is worth. It is the wrong choice. The sound wakes the sleeping knights, who charge at him. The next thing Sir Guy knows, he is once again outside the castle walls, in the cold, the dark and the rain. There he wanders to this day, seeking a way back to the lady in the crystal.

These are the bare bones of the story of Sir Guy the Seeker, which has been linked with Dunstanburgh in many different forms since at least the early 19th century. Some versions of the story (reproduced in Lewis 1808; Service 1834) are more elaborate: sometimes Sir Guy is a knight returning from crusade (unlikely, given that Dunstanburgh was not begun until 1313); sometimes he tethers his horse to a yew tree growing outside the gatehouse (again unlikely, given Dunstanburgh's geography); sometimes the staircase leads up rather than down; sometimes the lady in the crystal tomb is guarded by snakes, or surrounded by treasure chests; sometimes the horn belongs to Merlin. In some versions, the wizard who guides the wandering knight is 'Merlin's man' or even Merlin himself, and this connection has been increasingly emphasised in more recent oral versions of the story (for example, see Dixon 1993). Certain features of the story are constant: the wizard; the staircase; the lady in the crystal; the choice between the sword and the hunting horn.

The story appeared in a rash of poems, of which the earliest and best-known is *Sir Guy the Seeker* by Matthew Gregory Lewis, published in 1808 in his *Romantic Tales*. Lewis, author of *The Monk*, was a well-known writer in the Gothic style, who is reputed to have brought Sir Walter Scott to prominence. Nevertheless, Scott, writing in 1888, remarks that Lewis' version of the legend, 'of which, we must confess, we do not think very much...is perhaps the best'. Lewis wrote it while staying at Howick, seat of Earl Grey, whose ancestor, Sir Ralph Grey, had acquired Dunstanburgh in 1605 (Lewis 1808, preface; Richardson 1844).

Lewis' poem was followed by several other versions of the tale (Scott 1888). In 1820 James Service of Chatton wrote *The Wandering Knight of Dunstanborough Castle* (Service 1822). His verses open with an address to the castle, and continue with an atmospheric description:

Where the wild sweeping billows incessantly roar
Through the rude caverned cliffs of Northumberland's shore,
From its bleak rocky throne, in magnificent pride,
The turrets of Dunstanborough gleam o'er the tide.

His account more or less follows Lewis' to begin with, describing the lady in the crystal tomb and the choice between the horn and the sword:

But on which soe'er thou dar'st decide,
Whate'er bechance, whate'er betide,
Beware thou cast it not aside!

(Service 1822)

However, in Service's version, unusually the knight chooses the sword, not the horn. The giant guarding the lady in the crystal tomb springs to life and blows the bugle, waking the sleeping army. The sword then turns into a snake, and the knight's mistake lies in flinging it away. As a result he is cast out, cursed to search forever for the lady whom he failed to rescue.

In the introduction to his poem, Service purports to recount Lewis' version of the legend. In this retelling, however, there are some important differences from Lewis. A retired soldier on half-pay wanders around Dunstanburgh in search of treasure that is reputedly buried there. At midnight he is invited into the castle and, faced with the choice of the horn and the sword, chooses the horn. Interestingly, in this version Service does not mention the lady in the tomb at all.

Yet another variation on the story was written at about the same date by WG Thompson and entitled *The Coral Wreath, or the Spell-Bound Knight* (Thompson 1821). In this poem, the captive lady of the castle (Edith) is discovered by the knight (Gereddin) who, after a long battle, cuts through the coral wreath that surrounds her crystal tomb, and frees her. In his introduction to the work, Thompson admits this twist to have been his own invention:

Happening to hear a gentleman observe that it would have been much more agreeable had the result been fortunate, and recalling that the Edinburgh Review says 'the readers of romance do not like an unsuccessful warrior,' I immediately determined the liberation of the wanderer
(Thompson 1821, 76)

Walter Scott (1888) is dismissive of this 'improvement': 'There is not an old crone in the parish of Embleton that has ever heard tell of the lady being disenchanting, as William Gill Thompson fancifully represents her to have been'. Thompson himself attributes the inspiration for his poem to 'a small but well-written poem, lately published, entitled *The Wandering Knight of Dunstanborough Castle*.' This seems to be Service's version, as Thompson refers to the knight who chooses the sword rather than the horn, and whose mistake lies in casting it aside.

In his introduction to his poem, *The Seeker*, the anonymous 'A.B.' refers disapprovingly to MG Lewis' version: 'That it was miscalled a 'Northumbrian Tradition' is too evident to need a formal proof...On such subjects Lewis stood alone' (Service 1834, 28). He offers Sewing Shields in south Northumberland as the origin of the story. A.B.'s own poem, a moralistic tale of avarice punished by shipwreck on the Farne Islands, ends at Dunstanburgh, to which

the frightened sinner, Rupert, is lured. There he is shown unimaginable riches from every pagan empire. He is then struck blind and doomed to walk the fields of his childhood as a beggar. When, after seven years, Rupert's sight is restored, the temptation of treasure once again lures him, this time over the edge of the cliff at Dunstanburgh to his death. It is difficult not to conclude that the disapproving A.B. had Lewis' Gothic inclinations and material success in mind when he wrote this poem.

Service is in many ways the most interesting of the Dunstanburgh poets, because he was local, and, like Lewis, had a genuine interest in preserving folklore. He gathered several authors' Dunstanburgh poems together in one volume, and wrote that he did so in an attempt 'to rescue from oblivion some of the traditionary and venerable associations' of Northumberland (Service 1834).

Service connects his own version with the ancient Christian legend of the Wandering Jew, as recounted in Thomas Percy's (1765) *Reliques of Ancient English Poetry*. He argues that 'the author of *The Seeker* (A.B.) has been too precipitate in concluding that the horn and the sword are only peculiar to Shewin' Shields (*sic*). These instruments have always been and still are recognised by all who are acquainted with the Romance'. Service also disagrees with A.B. about Lewis' credibility. 'From the remote antiquity and uncertain import of this legend, it is impossible to decipher its genuine meaning and origin' (Service 1834, 59).

Service writes of his own *Wandering Knight* that:

The incidents in this Legend are nearly the same as given by the late Mr T. Hastings, Schoolmaster at Dunstan, with the exception of the enchanted sword suddenly changing into a serpent. From the similarity of events in [Lewis'] *Sir Guy* and this piece, it is highly probable that Lewis had his information from the same source; for the late honoured teacher was a man to whom, on such subjects, great deference was paid, he being profoundly skilled in local antiquities and legendary lore. The story is still very popular in the vicinage of the castle, and, when related, is imbued with more or less poetical embellishment and marvellous 'conceites' in proportion to the fanciful ideas of the narrator. (Service 1834, 60-1)

MG Lewis (1808, x) likewise maintains that the story was 'founded upon a tradition current in Northumberland'. Writing in 1844, MA Richardson concurs:

We cannot quit this subject, without alluding to an incident which occurred a few years ago, to a pedestrian party from North Shields. They arrived at the village of Dunstan, near the castle, at that time which the people of the 'North Country' so beautifully and poetically call 'The Gloamin'...One of the party asked a little ragged urchin to shew them the castle. 'No thank you, Sir,' said the boy. 'I don't want to see him – it's just about the time when *he* starts!' A particular stress was laid on the pronoun, and it was necessary to ask for an explanation as to who and what this mysterious *he* was. 'Why sir,' said the

little fellow, *'Guy the Seeker*. If you want to meet him, / don't. He never meddles with anybody, but I'd rather not have his company!' ... An inquiry among the peasantry shewed that the legend obtained very general credence, and one old woman averred in the most positive manner, that she had met the Seeker!' (Richardson 1844; Society of Antiquaries of Newcastle 1885-86, 82)

However popular the story was among early 19th-century poets, and however prevalent in local folklore, it is extremely difficult to trace its origins farther back in time. Cadwallader Bates pointed to the similarity of Sir Guy's name to that of John Gois, the Captain of Dunstanburgh captured and beheaded in 1464 (Society of Antiquaries of Newcastle 1885-6, 77). The story also bears comparison with several other legends, most of which have strong Arthurian associations. A.B. is right to connect it with Sewing Shields, near Hexham, about 70kms (43 miles) south-west of Dunstanburgh. At that site, the earthwork remains of Robert Ogle's 'castle', possibly a 15th-century pele tower, stand on a stretch of the Great Whin Sill, a location topographically rather similar to that of Dunstanburgh. The Sewing Shields legend is explicitly Arthurian. In it, a shepherd seeking a lost ball of wool stumbles across King Arthur and his knights asleep in a cave, and must choose between a horn and a sword to rouse them. In this case the sword is the wrong choice (Grice 1944, 18-21; Society of Antiquaries of Newcastle 1885-86, 83).

The Eildon Hills, near Galashiels, 72kms (45 miles) west-north-west of Dunstanburgh, are an even more dramatic volcanic landform, topped by a late Bronze Age or Iron Age hillfort. There, Thomas the Rhymer finds an army of warriors asleep in a cave, where they will stay until the day when all Gaeldom shall rise up against its oppressors (Scott 1885, Letter IV). He, too, must make a choice between the horn and the sword to rouse them. A similar story has been attributed to a cave beneath Tynemouth, while A.B. refers to a legend of treasure 'under the rocks of Tynemouth' (Anon 1992, 41-2; A.B. in Service 1834, 56). If these stories are linked in any way to the Dunstanburgh legend, the topographical and geological similarity, particularly with Sewing Shields, should perhaps be borne in mind. Reference is made by several of Dunstanburgh's early 19th-century poets to the scattered natural outcrops around the castle, 'so numerous and large that it might be imagined a legion of fiends had diverted themselves by pounding a huge rock in pieces' (Service 1834, 61).

MG Lewis himself points out the prevalence of the legend, and its Arthurian connection: 'An adventure nearly similar to Sir Guy's is said to have taken place in various parts of Great Britain, particularly on the Pentland Hills in Scotland (where the prisoners are supposed to be King Arthur and his Knights of the Round Table) and in Lancashire, where an ale-house near Chorley...is known by the name of the Iron Gates' (Lewis 1808, preface). He chooses, however, to emphasise the difference in Dunstanburgh's legend from others of its genre, and to link it to the peculiarities of the local geology: 'The female captive I believe is peculiar to Dunstanburgh Castle; and certain shining stones, which are occasionally found in its neighbourhood, and which are called 'Dunstanburgh Diamonds', are supposed by the peasants to form part of that immense treasure, with which the Lady will reward her deliverer'. There

certainly seems to be a connection between the recurrent image of the lady trapped in crystal and this unusual local phenomenon.

None of the early 19th-century versions of the Sir Guy story at Dunstanburgh particularly stresses an Arthurian connection, beyond the reference to Merlin's horn. But the story does contain strong echoes of a long tradition of Quest folklore, in which a hero, having left behind King Arthur and his Round Table, must face military and amorous adventures before returning to King Arthur in triumph. The literature associated with this Quest mythology stretches back in Europe to Chretien de Troyes in the 12th century and in England to the anonymous story of *Sir Gawain and the Green Knight*, dated around 1375.

It is therefore quite possible that, if the Sir Guy the Seeker story has an earlier, medieval, connection with Dunstanburgh, its Arthurian implications were fully understood. Local folklore and oral tradition today connect Dunstanburgh with Merlin, although it is difficult to know how much credence to give to the antiquity of these beliefs. It has been claimed, for example, that Dunstanburgh is one of the few places that Merlin actually created (Stonehenge being another) (Meeting of the 'Northumberland Mysteries Group' at Dunstanburgh, 1985). According to Malory's *Morte d'Arthur*, Merlin's teacher, Bloyse, was Northumbrian (Vinaver (ed) 1971, 25). In the 19th century Denham Tracts, a contributor states that the 'true' legend of Dunstanburgh involves a chieftain who lies, like King Arthur, with his hounds, sword and bugle, in a vault beneath the rock (Folklore Society 1895, quoted in Screepton 1978, 32).

The crucial question is whether elements of the Sir Guy myth were connected with Dunstanburgh from medieval times; and this seems impossible to answer. The name Sir Guy was also that of one of the most popular heroes of medieval Romance, a figure who was sometimes associated with Northumberland, in particular in a ballad about a Northumbrian dragon:

....Bad tydinges I bring you,
In Northumberlande there is no man
But that they be slaigne everychone:
For there dare no man route,
By twenty myle rounde aboute,
For doubt of a foule dragon...

Thomas Percy, in his 1858 *Reliques of Ancient English Poetry*, vol. III, 83-4, quotes this section of verse from an 'ancient rhymer' 'Imprynted in London – for Wylliam Copland'. The verse is quoted in relation to the legend of Sir Guy of Warwick which also appears in Copland's collection.

This story is usually associated with Longwitton, and there is no particular connection with Dunstanburgh. However, some writers have, somewhat tenuously, connected the snakes which often appear in the Dunstanburgh legend with ancient dragon mythology (Screepton 1978). A more explicit dragon story is associated with Bamburgh Castle and Spindleston, a few miles north of Dunstanburgh (Grice 1944, 56-61 and 95-9).

The most interesting, if equally tenuous, claim about the legend has been made by Cyril Harrison (Harrison 1989). He maintains that the earliest written version of the Wandering Knight legend explicitly associated with Dunstanburgh appeared in 1464, in a poem by one of the castle's bailiffs, John Gosse. If it could be shown to exist, Gosse's poem would be of enormous interest: after the siege of Dunstanburgh in 1464, when the castle capitulated to the Yorkists, the two constables, Sir Ralph Percy and Stephen Hatfield, were allowed to stay, but Gosse was captured and beheaded. If Gosse had written such a poem, his fate would raise questions about its hidden political message. It might be possible to interpret the implications of the myth in relation to the medieval concept of good lordship, and in particular to the inability of King Henry VI (1422-1461) to administer patronage (represented by the horn) and provide justice (the sword) (Porteous 2004). Political poetry, both explicit and allegorical, was a highly popular genre, exploited by both sides in the Wars of the Roses for propaganda purposes (Scattergood 1971; Wright 1859-61; Robbins 1952; 1959). Sadly, the poem attributed to Gosse by Harrison does not appear, either in form or diction, to be medieval.

Another unsolved mystery arises from the contemporary masterpiece of medieval Arthurian literature, Thomas Malory's *Morte D'Arthur*, completed by about 1470. Malory changed sides several times during the Wars of the Roses. He took part in the expedition of Edward IV and the Earl of Warwick against Alnwick, Bamburgh and Dunstanburgh castles, yet was named in 1468 and 1470 as an 'irreconcilable Lancastrian', and completed *Morte D' Arthur* in prison. Near the end of his epic, he writes that Lancelot asks to be buried at Joyous Garde: 'Some men say it was Alnwick, and some men say it was Bamborough' (Malory Book XXI; Vinaver (ed) 1971, 724). There may be a good reason why he does not mention Dunstanburgh, or it might be sheer coincidence; but it is possible that there might be a hidden message implicit in this omission. If Joyous Garde is Alnwick or Bamburgh, what does that make Dunstanburgh?

Whatever the origins of the Dunstanburgh myth, by the 19th century it would seem that several legendary strands had converged and intertwined. It might well be that the Arthurian legend of the sleeping army, with the sword and the hunting horn, was one strand; the snakes (or dragon?) legend another; and the lady in the crystal tomb a third.

It is impossible to know, but interesting to speculate, that the origins of at least some of these strands are of great antiquity. In an eccentric newspaper article of about 1889, which suggests that Dunstanburgh, being of little antiquarian interest, should be converted into an isolation hospital, the writer mentions 'traditions of the old natives... about the building of the castle, which is said to have been done by little men with leather aprons. The men are remembered as 'piks' (Anon. c.1889). Whether this story genuinely existed amongst local people and, if so, what we can infer from this about the antiquity of oral tradition, remains uncertain.

6.2 Recent oral tradition: the Key of the Castle and other stories

In the latter part of the 20th century, several stories about the castle remained in local oral tradition. Most prominent among these is the story of the Key of the Castle, told to the author by, among others, Mrs Phyllis Carr-Ellison, sister of Sir John Craster, then aged around 80, and Major Donald Leslie, a well-known local historian. According to this legend, a child was imprisoned in the castle dungeon (presumably the cellar beneath the western tower of the gatehouse). She (or he) escaped during a battle and fled to the Lilburn Tower, taking the key of the dungeon with her. In her panic, in case she was recaptured, she threw the key into a nearby field. The ground on which it fell then became infertile. The story is used to explain the S-shaped unploughed outcrop in the arable field to the northwest of the castle (see Figure 10). It may be relevant that the name 'The Due' has been applied to a dyke within the basalt located further to the north-west since at least the mid-19th century.

A second story, related in a school project by a Craster resident, G. Lumsden, lent to the author in the early 1980s, involves an ancestor of a Mr Chatton, called Gallon. Gallon was said to be left in charge of the castle by Margaret of Anjou before the battle of Hedgeley Moor on 25th April 1464. She left valuables in his care, and instead of a receipt, she is said to have announced, 'Gallon, I trust your word is your bond; here is my seal.' And in front of everyone, she kissed him.

After the battle, Gallon was imprisoned in a wooden building within the castle; but just beforehand, he lowered Margaret's treasure into a waiting boat. He then managed to escape, but was recaptured and thrown into the well. Interestingly, there is said to be a tunnel leading from the well to the boggy field on the west side of the castle, the site of either the North or West Mere, described in Section 8.7. Gallon escaped through this tunnel and swam out to sea, where he lay in wait for a boat. When one approached, he killed the boatman, commandeered the boat, and sailed to Alnmouth, where he hid with relatives on Church Hill. It is said that he left Margaret's bullion behind because it was too heavy; but that he was able to recover six drinking glasses given to her by the Doge of Venice, which he buried in the entrance to the house. When the Yorkist troops arrived, they searched the house and burned it down, but they did not find the glasses. Gallon was then able to recover them and have the house re-roofed.

Whatever the provenance and historical accuracy of this story, it is fascinating in its detail. The connection of the castle with an important lady, in this case Margaret of Anjou, and with treasure, is a recurrent theme; but it is also interesting to note that, at least throughout the 14th century, there were indeed castle officials by the name of Gallon or Galoun. There was a Receiver of Dunstanburgh named Thomas Galoun in 1382, while William Galoun appears to have been a Bailiff of the castle at an earlier date (Bates 1895, 201).

The story of the tunnel from the well to the boggy ground at the west of the castle also deserves consideration: the well at Bamburgh Castle has just such an 'escape route' to the west. Inevitably, local oral tradition also suggests subterranean passages running from Dunstanburgh, variously, to Proctor Steads, Craster Tower and Embleton vicarage. These

ubiquitous traditions probably have their origin in drains or other water-courses (Honeyman 1928, 96).

It is interesting to note how many of Dunstanburgh's stories, like that of Gallon, connect the castle with Margaret of Anjou. The most well-known of these is that of the Egyncleugh Tower, also sometimes known as 'Margaret Tower', from which Margaret of Anjou is said to have escaped to France, lowered in a basket to a boat waiting below in the sheer-sided inlet called Queen Margaret's Cove (Society of Antiquaries of Newcastle 1885-6, 77). The inlet is still known locally as 'Margaret's Gut'. In 1776, 1861 and 1893, the name 'Rumble Churn' was applied to this, rather than to the feature in Gull Crag that bears that name today (Hutchinson 1776, 188-9; Ordnance Survey 1866; 1897; Hodges 1893). Cadwallader Bates asserted that this was erroneous and by 1896, the inlet had generally acquired the association with Queen Margaret (Society of Antiquaries of Newcastle 1885-6, 81). The apparent suddenness of this change perhaps indicates the deliberate manufacture of a mythological pedigree at about the time when Bates was carrying out his research. There is no historical support for the association, but it is interesting on several counts: it is possible that the name 'Margaret' might precede the association of the tower with Margaret of Anjou. It has been pointed out that the chief vessel of Richard of Embleton, a Newcastle merchant who was Keeper of the Northumberland castles and lands of the late Thomas of Lancaster from 1322, was called 'La Margerie' (Society of Antiquaries of Newcastle 1885-6, 82). 'Margaret' was also a traditional name for an important lady in Northumberland's older dragon legends, such as that of the Laidley Worm of Spindleston.

Ghost stories inevitably continue to accrue around the castle. Besides the 'official' ghost, Sir Guy, in whom no one now really seems to believe, locals often tell tales of haunting. The lady in the crystal seems to have transmogrified into 'the white lady' of the castle (Tegner 1974). In 1930, Alan Ian, eighth Duke of Northumberland, published *The Shadow on the Moor*; a story, said to be based in fact, about a ghostly fox-hunt which began in the gorse cover beneath Dunstanburgh, and which led Tom the huntsman to his grave. There are many other individual stories. Elderly local resident Major Leslie, for example, recalled the behaviour of the first Custodian of the castle, who took up his post in 1930. A fearless veteran of World War I, James Mackay of Embleton always avoided the Constable's Tower towards dusk, where his black labrador, Freda, would growl, hackles raised.

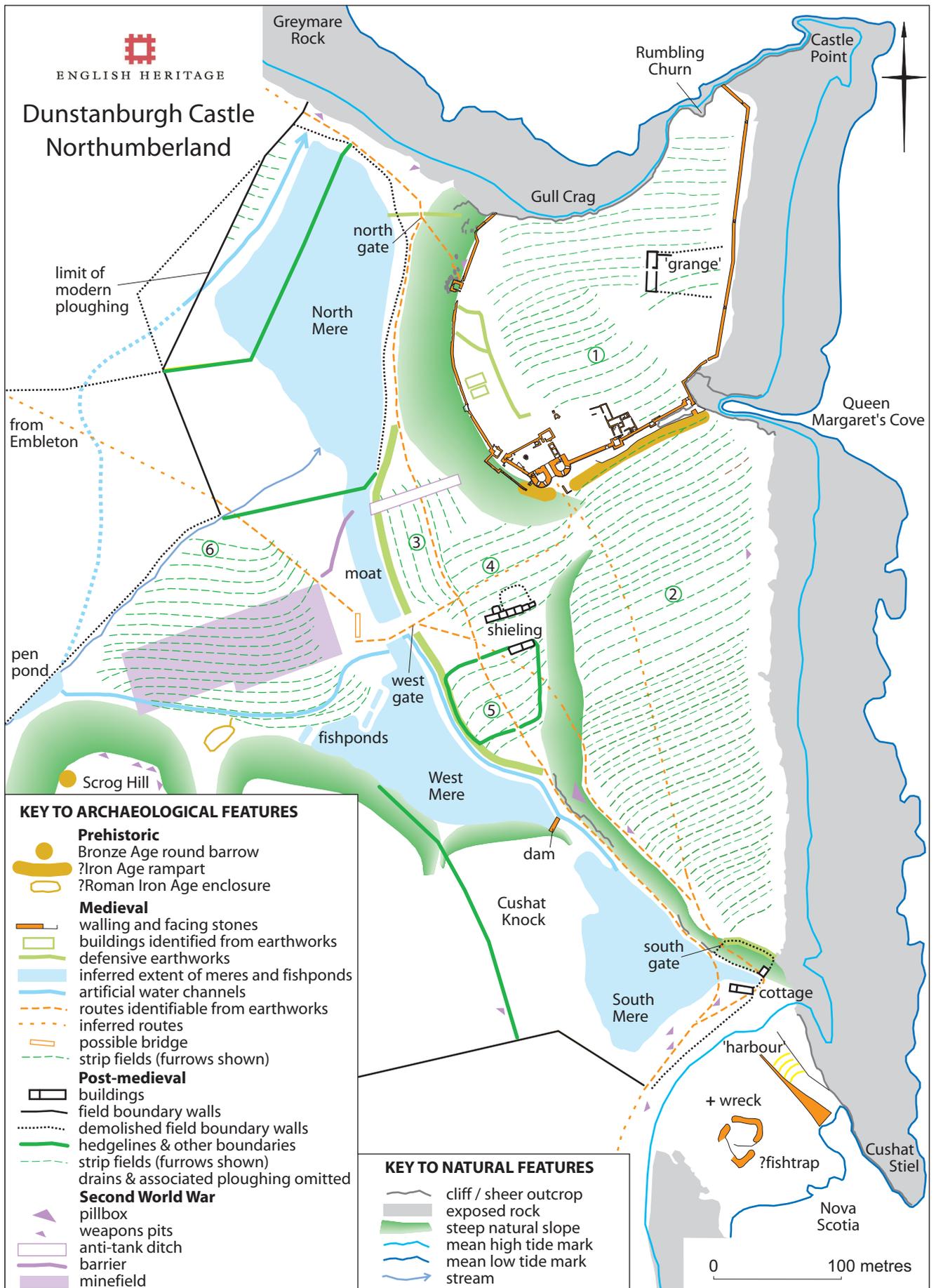


Figure 10. Schematic plan of Dunstanburgh castle and its environs (scaled to fit)

7. PREHISTORIC REMAINS

7.1 The possible Iron Age promontory fort

The 'burgh' element of Dunstanburgh, in this and various other forms, derives from the Anglo-Saxon *burg*, meaning 'fort'. The term is attached to some defensive enclosures built from scratch in the Anglian period and it was initially inferred from this that there must have been some 'Dark Age' occupation of the headland, as at Bamburgh (Bates 1891, 168; 1895, 197; Abbott 1930; Hunter-Blair and Honeyman 1936, 1; 1947, 1).

However, the term *burg* is more frequently associated with prehistoric fortifications that presumably still survived as prominent earthworks in the post-Roman period. The argument that such a defensible and visually striking eminence is unlikely to have been ignored in prehistory carries as much weight today as it did when the possibility was first proposed in the late 19th century (Bates 1891, 168; 1895, 197). Partly for this reason, the existence of an Iron Age fort came to be considered so likely that Dunstanburgh that George Jobey marked it as a definite site on distribution maps (Jobey 1965, fig 18). His re-examination of the prehistoric pottery unearthed in the 1922-31 excavations, which comprised sherds from a maximum of five vessels, led him to conclude that there may well have been a prehistoric settlement on the promontory, perhaps dating as early as the 6th century BC (Jobey 1972). In 2005, re-examination by David Heslop of the two whole and eight broken quern stones recovered from the same excavations (re-discovered in a packing crate in the western porter's lodge) pointed to a similar conclusion, for all are upper 'beehive' stones, whose use spanned the period between the 5th century BC and the 2nd century AD (Figure 11).



Figure 11.
Iron Age or Roman
period rotary
quernstones
unearthed in the
1920s and 1930

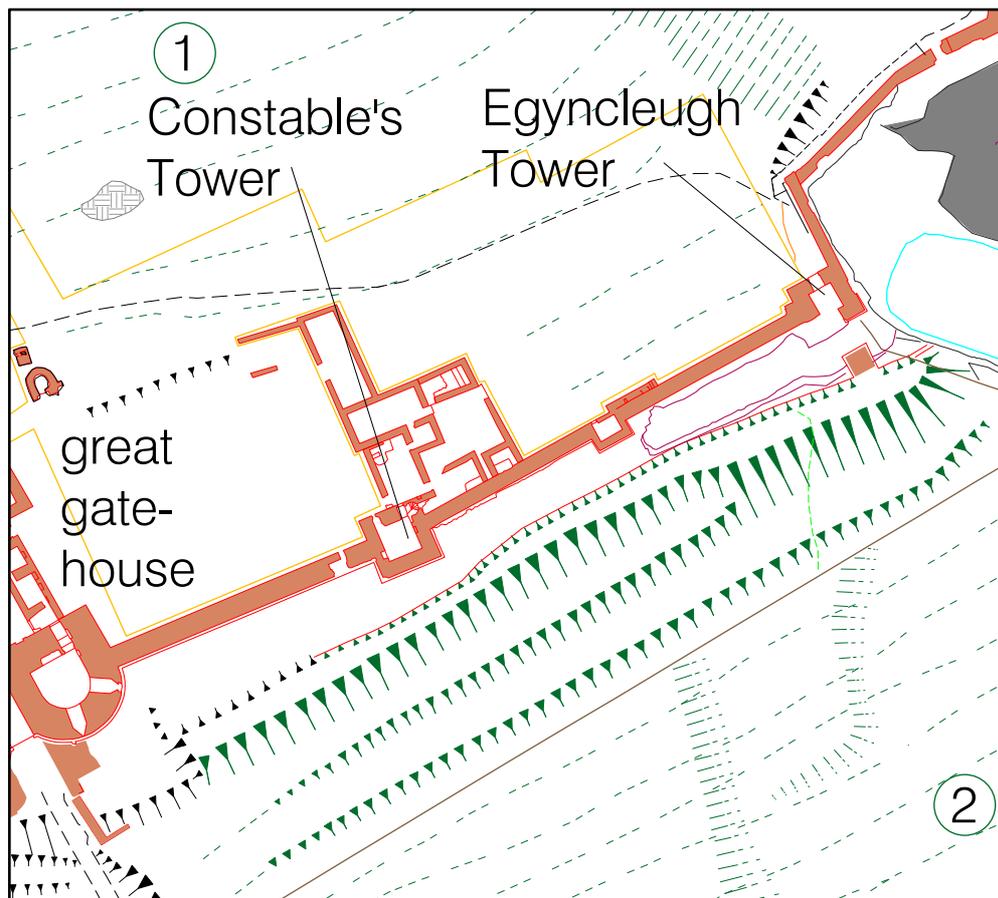
Despite this, others have been sceptical of the placename evidence, pointing out that the name Dunstanburgh is not recorded before May 1313 and suggesting that it could be a deliberate invention by Earl Thomas of Lancaster to invite comparison with the King's stronghold at Bamburgh (Summerson 1993, 5).

The absence of more obvious evidence for earthen defences can be justifiably explained away by the likely form of any hillfort: given the natural topography, it is likely to have been a 'promontory fort', with a relatively short length of artificial defences across the least defensible approach, rather than a complete circuit. The medieval curtain wall is very likely to have followed the same line as any prehistoric defence along the crest of the outcrop, further reducing the chance of any earlier earthwork being immediately apparent (Jobey 1972, 289-90). An Iron Age promontory fort may have been similarly concealed or transformed at Scarborough Castle, North Yorkshire. At Dunstanburgh, it is open to question whether any appreciable earthwork would ever have been constructed along the west side of the outcrop, where the natural slope is exceptionally steep. Therefore the scope for detecting any surviving surface traces of prehistoric defences could be assumed to be limited to the southern side of the outcrop. There, the natural slope is relatively gentle, so the size of any artificial earthwork defence might be assumed to be large in order to compensate. This being said, the same defensive weakness may have prompted the construction of an additional obstacle in the form of an earthen embankment in the medieval period.

Along the outside of the dry moat in front of the south curtain wall, and effectively amplifying the depth of the moat for most of its length, runs a broad earthen bank whose construction has usually been assumed, when mentioned at all, to be broadly contemporary with the curtain wall (Figure 12). Its alignment continues the steep escarpment on the western side of the castle outcrop. The evidence for this bank being the remnant of a prehistoric rampart comes in the form of several observations and inferences; while the observations are secure, the inferences based on them are open to other interpretations and therefore the conclusion must remain tentative. Ultimately, excavation may offer the only hope of testing the theory.

Firstly, it is clear that the bank has been ploughed over by ridge and furrow fields, flattening its top and producing a series of pronounced lynchets in its southern face. The bank now stands to a maximum height of 1.1m and the volume of material shifted by the ploughing suggests that it may originally have stood to around twice this height. The date of the agriculture, however, is open to question. As described in Section 8.10, ploughing was taking place within the curtain wall in the late 17th century and perhaps during the residency of Alice Craster at the end of the 16th century. If the ploughing responsible for degrading the bank is of post-medieval date, a medieval origin for the bank is possible. However, subdivision of the broad ridges to form narrower ridges that are presumably of post-medieval date is only evident in the southern half of Field 2, not in the vicinity of the curtain wall. In addition, there are indications at a number of points, including the areas left unexcavated immediately within the southern curtain wall, that the castle was built on top of broad ridge and furrow fields. If the ploughing responsible for the degraded condition of the bank was carried out prior to 1313, then the case for an Iron Age origin for the earthwork is strong.

Figure 12.
Plan of the south
curtain wall and
possible rampart of
the Iron Age hillfort
(1:1 000 scale)



Secondly, the ditch fronting the curtain wall was evidently formed in part by stripping the turf and thin topsoil in front of the wall down to bedrock, and in part by using the height of the bank material to enhance the outer edge. The outer edge of the ditch is formed by a well-constructed drystone wall built to revet the body of the bank. At its eastern end, this wall projects to form the bridge abutment for the drawbridge into the Egyncleugh Tower, which was almost certainly part of the 1313 design. Nonetheless, the revetment wall appears to cut into the bank and truncate the cultivation ridge surmounting it. This would seem to lend support to the theory that the ploughing predates the construction of the castle. What leaves this observation open to question is the extent of the restoration of the drystone wall prior to 1930, which might have rendered the surface relationship deceptive. It is also possible that spoil from the clearing out of the ditch might have been carefully spread on the summit of the bank, confusing the superficial traces, although most other evidence suggests that spoil was tipped on the slope further to the south (see Section 4). The fact that Cadwallader Bates proposed a prehistoric date for the 'rough stone rampart' indicates that the walling did at least exist, and was visible, prior to the restoration work carried out in the later 19th and early 20th centuries (Bates 1891, 168; 1895, 197).

If the bank is of Iron Age origin, the placement of the curtain wall in relation to it begs a question as to why the wall was not sited on top of the bank, as occurred in other cases. This can perhaps be explained to some degree by the negligible height advantage which the degraded bank would have offered, and also by the evident desire of the medieval masons to build the wall foundations directly onto solid rock, presumably to foil attempts at undermining.

In this light, the decision to build the wall behind the line of the possible rampart as a way of avoiding un-necessary effort in digging it all away, while at the same time making some use of what limited potential it offered for enhancing the new fortification. The present extent of the possible rampart suggests that the gateway would have been located in approximately the same position as Thomas of Lancaster's great gatehouse.

7.2 Other prehistoric remains

A previously unrecorded round barrow, almost certainly of early Bronze Age date (around 2,000 to 1,800 BC), was identified on the highest point of Scrog Hill. The barrow is small, no more than 0.4m high, but retains several stones which may represent the remains of a kerb. Although the surrounding area has been subject to medieval or later ploughing, the barrow has apparently escaped eradication because it lies (typically) on the very edge of the escarpment where the soil is of such negligible depth that it was not considered worth ploughing. A single flint waste flake, undiagnostic of any specific period but probably Neolithic or Bronze Age, was recorded within 60m of the monument. Two early Neolithic leaf-shaped arrowheads, found further south along the top of the escarpment, were donated to Newcastle Museum in 1922 (Buckley 1923). The finder also reported the discovery of two Mesolithic flint scatters, of which one was on Scrog Hill itself (Buckley 1929).

The 1930-1 excavations within the curtain wall recovered a single sherd of an early Bronze Age beaker. The most likely context for this type of vessel is funerary, so it is possible that another round barrow occupied high ground on the west of the castle outcrop and was masked by the medieval works. The apparently natural mound to the north of the cutting behind John of Gaunt's gateway, shown by geophysical survey in 1989 to be a deposit overlying the basalt, is a possible candidate, though – if anything - it more probably represents spoil from the digging of the cutting inside the gateway. Another possible candidate is the unexplained flattened mound immediately south-east of the Lilburn Tower (see Figure 14).

A small, poorly-preserved enclosure was identified at the base of a minor defile which gives access onto the high ground of Cushat Knock. The form and condition of the enclosure, together with the presence within it of what may be a platform for a small circular building, suggest that it may be of late Iron Age or Romano-British origin. A short distance upslope, a low drystone wall appears to have blocked the neck of the defile, although the central section has been removed or eroded away. It is unclear whether this is an element of the same enclosure, the continuation of a medieval or later field boundary in the field to the south, or an entirely separate feature of uncertain date and function.

8. THE MEDIEVAL CASTLE AND ASSOCIATED REMAINS

8.1 The great gatehouse of Thomas of Lancaster

8.1.1 The location and orientation of the gatehouse

The location and orientation of the great gatehouse (see Figures 13 and 14) were influenced by various factors. The narrow neck of the promontory to a large degree determined the line of the south curtain wall and the gatehouse occupied the highest point on that line, with the escarpment lending natural protection to its western flank. It seems likely that the gateway of the putative Iron Age promontory fort, whose existence is discussed in Section 7.1, would have been located in approximately the same position, arguably for similar reasons. Summerson's (1993, 11) conclusion that 'Dunstanburgh could really only be approached from the south' is based primarily on the orientation of the gatehouse and thus the castle's most architecturally impressive aspect. This theory must be revised in the light of the identification in 2003 of what is almost certainly the castle's principle landward approach, from Embleton, the chief settlement and administrative centre of the barony, via the western gateway through the outermost perimeter (see Section 8.8). However, this then begs the question as to why the gatehouse was not oriented westwards, towards the line of approach, as was John of Gaunt's later gateway. To some extent, the prolonged and indirect route by which the gatehouse now seems to have been reached could be considered characteristic of the medieval tendency to progressively reveal lordly dwellings to approaching visitors: the orientation of the gatehouse away from the line of approach creates the important final *coup de théâtre* (for examples, see Johnson 2002). The fact that the gate passage is aligned on the south-western turret of the Lilburn Tower, so that it would have been framed in the gate passage when the gates were open (see Figure 13), may be largely coincidental, given the



Figure 13.
The great gatehouse
of Thomas of
Lancaster

variety of factors that influenced the specific locations of both towers. It may be more significant that the gatehouse was oriented almost directly towards the seaward end of the jetty discovered in 2003, which may also have been a point of arrival for distinguished visitors (see Section 8.9). Although the alignment is not precise, from a distance of more than half a kilometre the slight mismatch is not perceptible with the naked eye.

8.1.2 The form of the gatehouse

Between 2004 and 2006, the structure was progressively examined from the ground and from accessible high-level areas within the building. The hypotheses and conclusions drawn here are therefore provisional and may require alteration in the light of closer observation, or accurate survey, of the less accessible parts of the structure at upper levels.

The essential form of the gatehouse, first described in detail by Cadwallader Bates (*Society of Antiquaries of Newcastle 1885-6; Bates 1891*) is well understood. The plan of the building, with two large D-shaped, or 'drum' towers flanking a central passageway, follows a classic model of great castle gatehouses, particularly associated with English and Welsh castles of the second half of the 13th century. Such massive gatehouses have traditionally been interpreted in terms of military strength, protecting supposed weak points in the perimeters and often incorporating lengthy sequences of defensive features: gates, portcullises, 'murder-holes', arrow-slits. According to this mode of interpretation, the gatehouse compensated for the absence of a genuine keep by providing accommodation on the upper floors, leading to the term 'keep gatehouse.' It has also been acknowledged that these were structures of enormous visual presence and symbolic power, and in this respect Dunstanburgh's gatehouse certainly fits the model well. The gatehouse is unique among the towers of Dunstanburgh Castle and unusual among the castles of northern England, particularly the North-East, in its use of rounded rather than square plan-forms. This supports the theory that the gatehouse represents the influence of an imported architectural tradition and it is suggested here that this derived directly from the royal works.

It is difficult to ascertain where the form of the gatehouse originated: an example of the presumed prototype, the pairing of two round towers with a gate between, has recently been dated to the late 12th century (Turner 2002, 11). Several documented gatehouses which may have conformed to the type have been lost, especially on royal sites including Windsor Castle in Berkshire (1230s), Winchester Castle in Hampshire and the Tower of London (both around 1240) and York (late 1240s). Some of the earliest surviving examples exist on baronial sites, notably the castles of the earls of Gloucester at Tonbridge (Kent) and Caerphilly (Glamorgan), built in the late 1250s and late 1260s respectively. The form is, however, particularly associated with royal works and especially castles built in Mid and North Wales for King Edward I (1272-1307). Though this is not the only form of gatehouse used here, important examples can be seen at Aberystwyth, Harlech and Beaumaris. A similar example was also constructed, almost certainly by the royal works organisation, at Kildrummy in Scotland. Other baronial sites exhibiting similar forms include Barnwell (Northamptonshire), Llansteffan (Carmarthenshire) and Leybourne (Kent). Several of the examples mentioned here have adjoining structures, such as lateral towers and staircase

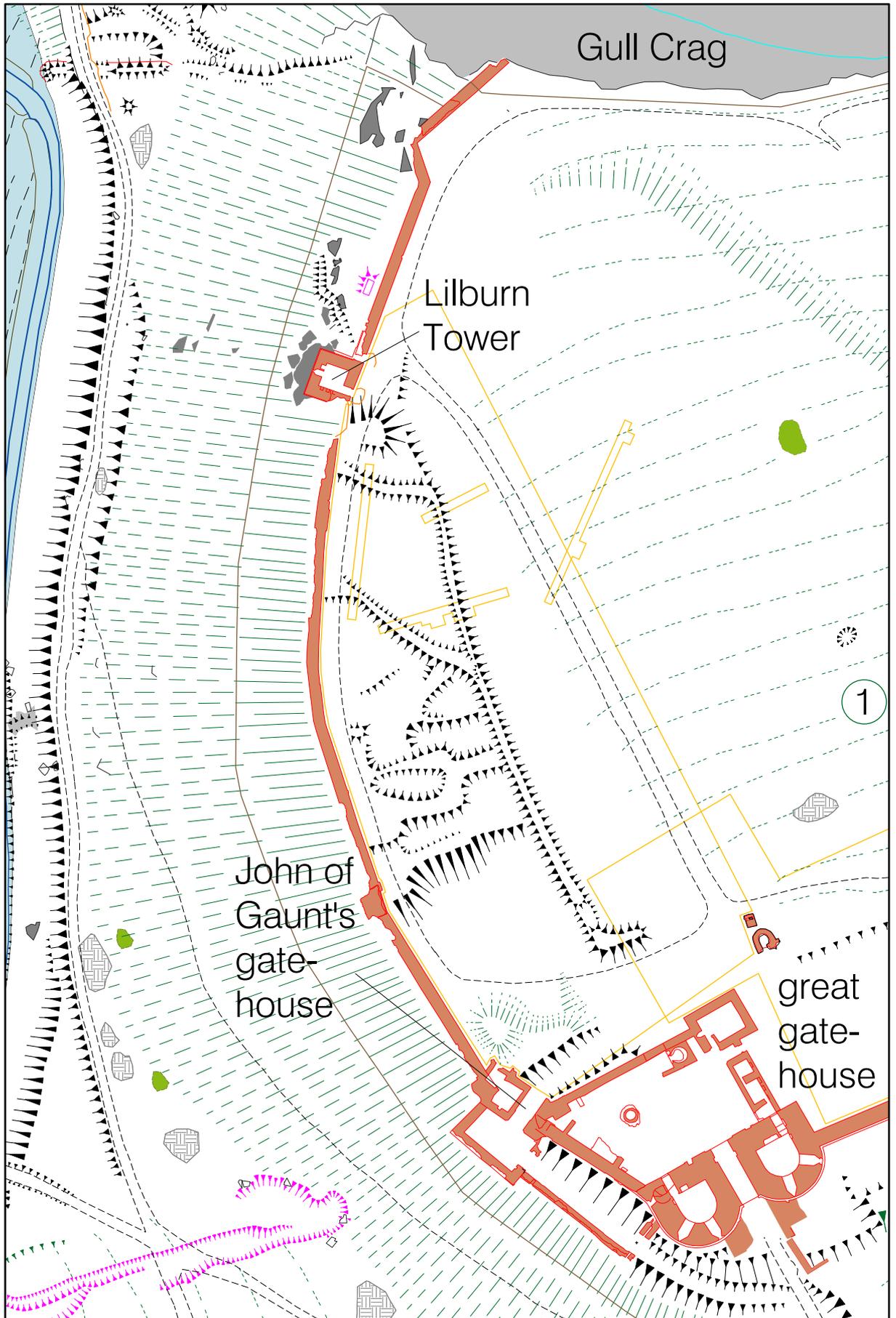


Figure 14. Plan of the great gatehouse and west curtain wall (1:1 000 scale)

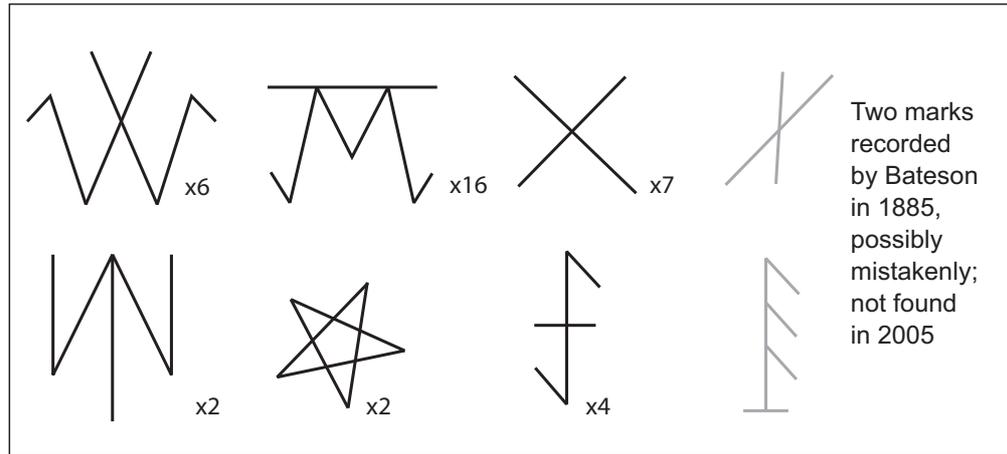
turrets on their rear angles: however, the distinctive features shared by all of them, including Dunstanburgh, are the symmetrical plan of the flanking towers, their large size, their possession of two or three storeys, and in most cases, their capacity for residential accommodation on upper floors.

Like Tonbridge and Caerphilly, though unlike other examples such as Harlech and Beaumaris, each drum tower at Dunstanburgh was not internally subdivided, but extended from front to back in a single space (not counting the small intra-mural porters' lodges inside the north walls). On the first floor, the plan was symmetrical, with an octagonal-fronted chamber in each tower and a central room over the gate passage. The masonry of the rear wall of the central room contains evidence of the arrangement for raising or lowering the portcullis below: the ropes or chains, contained within a slot in the thickness of the wall, seem to have been run onto the floor above, and then probably back down, through pulleys. The second floor was either one unified space or was only subdivided by timber partitions which have left no trace: the stone dividing walls of the lower two floors terminated at this level. Access between the different floors was by two spiral stairs in the rear corner turrets of the building. Only the north-east turret is presently accessible (via a modern concrete stair).

Very few architectural details survive in the fabric, but they show general consistency throughout the building. The gatehouse contains numerous examples of shouldered or 'Caernarfon' door and window-heads on its upper levels: at ground level, simple two-centred arches predominate. True 'Caernarfon' arches can be seen in the second-floor south doorway leading into a latrine in the south-west drum tower, or in the doors leading from the lead roof into the turrets of both drum towers, and evidently two of the large two-light windows in the north wall of the second floor. Others adopt a simplified angular form of the same type, particularly the two-light windows in the drum towers and the third tall second-floor window in the north elevation. Use of this style has no important dating implications: the 'Caernarfon' arch appeared in buildings all over England and Wales from the 1270s onwards, and the connection with the royal works of North Wales is by no means exclusive. However, it may be of interest that the angular variant also appears in the windows of other buildings at Dunstanburgh, notably rere-arches inside the Lilburn Tower. This could imply that the gatehouse was built by the same works organisation as the remainder of the castle, that its construction and that of the other buildings were not widely separated in time, or that the other buildings were modelled on the gatehouse (whose construction is known from documents to have been commenced at an early stage). In other words, the conclusion that the Lilburn Tower was completed after 1322, based purely on the evidence of its name, cannot be proved or disproved from the architectural evidence alone.

The gate-passage at ground level is barrel-vaulted with chamfered transverse ribs. Set above the outer arch and supporting the wall above is a row of five yellow sandstone corbels, which probably all carried carved emblems. Although no longer easily decipherable, Bates interpreted them as a lion (centre), a scallop shell (left), a *fleur de lys* (right) and perhaps another scallop shell (far right) (Society of Antiquaries of Newcastle 1885-6, 79; Bates 1891, 188). On either side of the central corbel are two 'tubes', cut at an angle through the

Figure 15.
Masons' marks within
the gate passage
(not to scale)



wall, presumably so that guards on the first floor could spy on and communicate with visitors standing at the mid-point of the barbican. Six different masons' marks are visible on the walls and ribs of the vault; some of the same marks also occur in the porters' lodges. (Figure 15). One mark, a simple cross, occurs on the Lilburn Tower, contrary to previous suggestions that they have none in common (Society of Antiquaries of Newcastle 1885-6, 79). Another, a five-pointed star, is reportedly also found on the Constable's Tower at Alnwick Castle, completed in the same decade as Dunstanburgh great gatehouse (Bates 1891, figure facing page 10; Summerson 1993, 12). A symbol resembling an M with a bar over it occurs at least sixteen times, almost as often as all the other marks combined. There are many pieces of later graffiti, primarily initials, including examples dated 1908 and 1927.

The portcullis was set close to the rear (north) end of the passage. Three regularly spaced cavities where stones have been removed on each side of the rear archway might seem to represent the positions of stones containing sinkings for pintols, but any gates at this point could only have opened inwards, because of the position of the portcullis, and the higher ground within the inner ward would then have prevented them from opening fully. In addition, such an arrangement would have left the doors of the porters' lodges on the wrong side of one set of the gates they were tasked to look after. The cavities are therefore likely to have been cut to provide keys for a later blocking wall (see Section 8.3).

The fabric at the southern end of the gate passage preserves no obvious evidence for any outer gates; the apparent absence of a rebate is particularly noticeable. However, a lack of gates at this point would have turned the gate passage itself into a safe haven for attackers, even allowing for the existence of a barbican (see Section 8.1.3), and is therefore difficult to entertain. Bates (1891, 194) concluded that the outer end of the passage must have been restored. Primarily on the evidence of two antiquarian depictions, it has been suggested that Sutherland had carried out major repair works at some point between c.1855 and 1865, changing the outer gateway from a round-headed arch to a pointed one in the process (Summerson 1993, 12). Hutchinson, writing in 1776, explicitly noted that the arch at the entrance of the gate passage was 'circular' and the engraving which accompanies the text shows it as such (Hutchinson 1778, 187-8). In 1885, Bates also commented, as though stating a fact, that the outer two ribs of the vault had been replaced, an assertion supported

by the absence of masons' marks on these two (Society of Antiquaries of Newcastle 1885-6, 79). The physical evidence is unequivocal: the face of the present outer arch is only keyed into the surrounding masonry at a single point, creating weakness inconceivable in a structure where strength was all-important, and the stonework is atypical, using small blocks with deeply pitted faces, as though deliberately 'rusticated' by restorers to suggest antiquity. This confirms that the archway had indeed been replaced at some point prior to 1884 (when the existing stonework was photographed by JW Robinson). Positive evidence for the former existence of outer gates is provided by the existence of two heavily eroded and apparently unrestored stones which project into the gate passage just above floor level. Both appear to have been chamfered, as though continuing the basal plinth that exists on the drum towers, and the stone on the east side of the passage retains traces of mortar on its upper surface, indicating that it was originally the lowest course of a taller projection. Assuming the stone on the west side was equivalent, such projections could readily be interpreted as rebates for inward-opening gates.

The third rib from the outer end of the passage is set at a higher level than the others; an undated sketch, held in the British Library, probably of 19th-century date, shows this arrangement, but unfortunately not the two ribs in front of the raised one. Bates suggested that the raised rib might have been inserted in place of a *meurtrière* or 'murder hole,' a plausible suggestion, but probably unprovable, since the stonework around the springer of the rib shows signs of patching and the whole floor above has clearly been restored. Alternatively, by analogy with other sites, the raised rib, if original, could be interpreted as an adaptation to allow head-room to open a pair of gates (information from Philip Dixon). On each side of the passage, a single, small, filled-in sinking, presumably for an iron fitting, is set 0.9m above ground level immediately in front of the fourth rib. Yet it seems unlikely that these sinkings held pintols, since - apart from the absence of additional sinkings higher in the wall - the front face of the fourth rib itself is chamfered like the rest. A depression in the eastern side wall of the passage appears to represent the point where another iron fitting rubbed into the wall and a shallow groove is chiselled into the same wall, further to the south, but neither of these marks can easily be associated with original gate fittings.

8.1.3 The form and date of the barbican

The remains immediately in front of the drum towers were all exposed in October 1929 by H L Honeyman, who removed 1.2m of overlying material, presumably resulting from the collapse of the upper portions of the curtain wall (Figure 16). The dilapidated walls closest to the gatehouse have been interpreted, undoubtedly correctly, as the two flanks of a barbican projecting southwards from the gatehouse, creating a narrow alleyway before the outer gates to provide additional protection (Summerson 1993, 12). Hunter Blair and Honeyman (1955, 14) were more confident about the issue of dating, suggesting that the outer part of the barbican was removed when John of Gaunt's entrance became the main means of access in the 1380s and that a square forebuilding was then built on top of the earlier foundations. This interpretation, which places great weight on the fact that the foundations are much wider than the wall they support, is open to question.



Figure 16.
The remains of the
east wall of the
barbican

The first documentary reference to a barbican does not appear until 1368 (*'...custus del barbican de novo facti ad portas turris infra castrum...'*). The phrase *'de novo facti'*, suggesting that the building had recently been built or rebuilt, is of interest given that Dunstanburgh had come into John of Gaunt's possession two years before. The Receivers' accounts for 1457-8 refer to a new tower at the entrance of the castle (*'...nova factura unius turris ad introitum castrum...'*, PRO DL 29/361/5983; Cambridge 1986, 29) but by this date, the conventional interpretation of the development of the defences would be that John of Gaunt's gateway was the entrance in question.

The best preserved feature, to the south of the barbican, is an L-shaped length of wall of roughly-dressed basalt blocks, which stands to a maximum height of 0.7m above ground. This is clearly a later addition to the original barbican, and is not necessarily even defensive in purpose. It abuts the surviving terminal of the east wall of the original barbican and extends southwards at a slight angle to the earlier wall and to the axis of the gate passage. At its southern end, it returns eastwards for a few metres in a narrower form. The masonry of the north-south stretch contains two openings approximately 0.3m square, and a third opening of the same width is created by the gap between the northern end of this wall and the southern end of the earlier barbican wall. Each successive opening steps down a course from north to south, so that they follow the descending ground level, like drains; they cannot have held joists for supporting a floor, nor do they appear to be loopholes of any kind. There is nothing to indicate that there was ever a symmetrical feature on the opposite side of the approach to the gate-passage; indeed, a wall of the same dimensions there would have blocked the track descending from John of Gaunt's gateway. On the other hand, to the east, the adjacent section of the earthen rampart discussed in Section 7.1 appears to have been deliberately levelled and the material pushed into the adjoining moat, creating a flat area. It is possible that this was done to prepare a platform for a building of which the L-

shaped wall formed one part. However, if the plan made for the first guidebook is accurate, the levelling was not carried out until after 1936 (Hunter Blair and Honeyman 1936).

The earlier barbican was built in squared ashlar blocks, which perhaps in part accounts for why most of the structure has been deliberately dismantled, leaving intact only the rubble foundations. Though the foundations are considerably wider than the walls they support, this need not imply that the two belong to different phases and represent two different structures, as suggested by Hunter Blair and Honeyman (1955, 14). The presence of toothing in the masonry of both gate towers and the lowermost course of stone of the southern terminal of the eastern wall indicate that the barbican indisputably comprised two walls projecting 9.4m southwards from the entrance of the gate passage, creating an additional entrance passage 6.8m wide, or just over twice the width of the main gate passage. At the southern end of the eastern wall, a 0.9m long stretch evidently stepped in 0.6m; the western wall was presumably symmetrical. The northern end of this constriction probably coincided with the position of gates or a portcullis. The presence of a drawbridge within the barbican, similar to that at Alnwick Castle for example, can be ruled out. One arm of a covered drain serving the latrine chute on the west drum tower passes across the interior of the barbican, 3.5m in front of the entrance to the gate passage, to discharge into the western end of the dry moat: this restricts the potential extent of a drawbridge pit to an impossible degree.

While the plan of the structure is therefore fairly straightforward to interpret, the appearance of its elevations are less easily explicable. Taken at face value, the continuation of the uppermost of the three plinths on the drum towers above the toothing seems to indicate that the side walls of the barbican were – highly improbably – no higher than 1.2m. The western wall was apparently 1.8m thick, extending up to the edge of the latrine chute mentioned above. The eastern wall was apparently 1.2m thick at the top, but the staggered ends of the middle and lower plinths on the eastern drum tower suggest that its outer face was not vertical, but had a broad step, also 1.2m wide, approximately half-way down. As with the absence of obvious evidence for gates at the outer end of the gate passage, this points to such an improbable form that it is preferable to believe that 19th-century restoration has distorted the evidence, specifically through the erroneous replacement of the plinth courses. If this is accepted, the form of the barbican may have been relatively uncomplicated.

The fact that the toothing does not disrupt the coursing of the walls of the gatehouse seems to indicate the barbican was built at the same time, as part of the initial construction work after 1313. (This conclusion was reached after the brief had been prepared for new on-site reconstruction drawings, which consequently omit the barbican). Pointing to the same conclusion, it has previously been noted that the arrow-loops in the drum towers are set so as to respect the extent of the barbican, in that none face inwards to cover the otherwise vulnerable area in front of the entrance to the gate passage (Summerson 1993, 14).

8.1.4 The form of the roof and the turrets

Dunstanburgh's arrangements at roof-level in are possibly unique. The body of the great tower was evidently covered with a low-pitched lead-covered roof immediately above the

second floor. During the recent examination, no clear evidence was noted for supports for this roof, apart from close-set sinkings in the south face of the north-east turret for horizontal joists or cambered beams running north-south, below a projecting moulding, and possibly the sinking for the northern wall-plate in the west side of the same turret. However, horizontal creases for the flashing of the lead covering can be seen in several places around the surviving fabric, and evidence for its low pitch and purlin-spacings survives at the north-west corner. Access onto the roof was possible via doors at the tops of the north-east and north-west staircase turrets: the door of the north-east turret survives, that of the north-west turret is inferred from the continuation of the stair to this level, which would otherwise have no function. This roof level corresponded to a parapet, probably crenellated, in several parts of the structure, including the space at the front of the gatehouse between the main towers (where the line of the parapet can be seen as a scar in the side of the west tower) and in the east and west sides of the main towers.

The most remarkable detail of the Dunstanburgh gatehouse is that substantial parts of the building stood considerably higher than this roof level, notably the frontal portions of the two main towers and two projections at the rear corners of the building. Both of these features are thought to be unique to Dunstanburgh.

As early as 1885, Bates realised that parts of the two main towers stood higher than the remainder of the building, later commenting that 'they formed a sort of false front of two additional storeys' (Bates 1891, 187). These thin, tall towers, with flat east, north and west walls, and frontages describing segments of the curvature of the main drum towers, could be entered directly from the lead roof of the body of the gatehouse through doors in their north walls: a door-jamb survives in the eastern tower. At this level, the front towers seem to have contained no more than shelters or bothies so that watchmen on the roof could take cover in inclement weather.

Surviving doorways in the western tower indicate that a further storey was provided above these shelters running up to the level of the lead roofs at the tower tops, with their own access doorway, making five storeys in all. These thin frontal turrets contained spiral stairs, accessible from the level of the main roof by doors facing each other across the space between the towers; these stairs led up to the two highest levels and the roofs of the thin rectangular turrets, corbelled out from the inner angles of each drum, which face each other across the space over gate-passage. Surviving crenellations on the rear (north) face of the western turret indicate that the turrets stood only slightly higher than the crenellations of the towers. The crenellations were set immediately above the moulded string-course (this detail was incorrectly shown in the new reconstruction drawings, which add an additional tier of masonry, making the rectangular turrets project above the drum towers much more than they would have done. The form of the turrets was based on those of the Lilburn Tower, which project further).

Apart from these high frontages, the drum towers were crenellated just above the level of the lead roofs. Though no battlements have survived, little height has been lost from these

sections of the building, and the medieval merlons can be seen in Francis Place's drawing of 1678 (Figure 5). However, the surviving evidence is enough to demonstrate that the gatehouse stood higher than the lead roofs in the two rear corners of the building, at the north-east and north-west angles. The north-east corner presently contains a concrete spiral stair, allowing access to a viewpoint. The original north-east stair ended in a door leading westwards onto the main roof, above which the stairwell was covered with a stone 'umbrella vault'; this vault is now broken and the visitor is able to stand at the level of the former roof, 15.5m (51 feet) above ground level. However, this vantage-point allows the inspection of a slightly higher portion of ashlar-faced masonry immediately to the north: the thick north wall of the gatehouse. It is clear from this section and from the corresponding wall at the north-west corner of the gatehouse, that these tall stretches of walling were capped with stairs rising from the level of the main lead roof of the gatehouse. The north-west corner also contains evidence for a parapet on the north side of the stair, protecting the watchmen from falling over the edge: it is not clear whether there was a corresponding parapet on the south side. These tall corner sections seem to have been no wider than the thickness of the wall; the stairs probably ended in platforms no larger the space necessary for a single man.

8.1.5 The functions of the rooms and internal access arrangements

As described in Section 8.1.2, at ground level the gatehouse contains two principal chambers, flanking the central carriageway. The rooms, interpreted as guardrooms, were entered from the north side of the gatehouse along narrow passageways, which also gave access to the spiral stairs in the corners: the doors leading in from the bailey could be sealed with drawbars. Both guardrooms were also provided with latrines, set in mural chambers in the outer flanks of the towers, discharging through the thickness of the wall. The guardrooms could be closed off from their entrance passages by northward-opening doors, affording some security to the soldiers, but also a measure of privacy to anyone entering the upper floors of the building by the spiral stairs which opened from the same passages.

Within the thickness of the north wall, the ground floor also contained two smaller rectangular chambers, set immediately behind the main guardrooms, but not communicating with them. These rooms were both originally entered from the gate-passage, just in front of the portcullis, and have been interpreted, certainly correctly, as porters' lodges (Summerson 1993, 12). The original entrance to the western chamber is now blocked and the present doors into the bailey of the castle are later modifications, created by widening original slit windows. Timber joists, apparently to support a low upper room or storage space, were probably inserted at this time. Both rooms contained wall-cupboards and were heated, again in their north walls; the chimneys of these rooms are projected slightly from the external plane of the wall, and though the ornate chimney-pots are apparently missing from 19th-century photographs, the chimneys themselves are original, and it is entirely possible that the pots have simply been recovered from the piles of tumbled stone shown lying around the area.

The western chamber, which is no longer accessible to the public, was memorably described in 1885 as 'a lurking place for tramps' (Society of Antiquaries of Newcastle 1885-6, 79). The

room stands over a 3.0m-deep subterranean chamber, plausibly interpreted as a cellar, perhaps occasionally used as a prison (Summerson 1993, 13). The existence of a *selarium* here is mentioned in 1351 and in 1543, the room was used to store lead, and its door was evidently still serviceable, having been locked by the deputy constable (PRO: Ministers' accounts, 1349-51; DL 3/44 R 4b-c, folios 45v, 45r, 46r; Cambridge 1986, 35). In passing, it is worth noting that this was where the quernstones excavated in 1930 and earlier were rediscovered in 2005, stored in a tea-chest. Since the walls are mostly constructed of masonry rather than being cut into the bedrock (limited inspection was carried out by torchlight from the entrance opening) and the eastern room apparently has no corresponding chamber, the room may owe its existence to a natural cavity in the basalt.

The first floor was reached by either one of two spiral stairs, located in the north-east and north-west corners of the gatehouse, and entered from the passages into the main guardrooms. These were the only means of access to the upper floors of the gatehouse and to the roof. The first floor contained three large rooms, two corresponding to the ground-floor guard-rooms in the drum towers and a third over the gate passage. The tower rooms at this level were octagonal-fronted, and were set on timber floors, their joists running north-south. Though similar in character to the ground-floor guard-rooms, the first-floor chambers contain more concessions to comfort, including two-light windows facing south, fitted with stone window-seats. The eastern room was heated with a fireplace in its east wall and provided with a latrine in a mural chamber; the western room seems to have been configured in a similar way, though poorer survival of facing stone at this end of the building makes this less certain. It is unclear whether there was any form of partition forming a corridor across the northern end of either of these rooms, but certainly doors were provided in the stone walls dividing both spaces from the central room, over the carriageway. The central room, at its northern end, contained a segmental-arched recess for the raised portcullis, which could be fixed in by two beams, seated in the north wall. The ropes for the portcullis were fed past this level and onto the floor above, and then, perhaps, back down via pulleys. It seems unlikely that the mechanism for operating the portcullis would have been housed in the high-status rooms on the floor above. Alternatively, there may have been no mechanism at all to operate the portcullis: normally locked in a raised position by two baulks of timber (whose sockets can still be seen on the first floor), it was dropped by gravity and raised again if necessary by teams of men on the second floor, using only ropes and brute force. A similar solution provides the best interpretation of the portcullis in the mid-12th-century keep at Rochester, in Kent, where any fixed mechanism would have blocked the only door into the chapel. The centre of the floor of the guard room, prior to the supposed insertion of the third vaulting rib below, may have held one or more murder holes, as discussed in Section 8.1.2. The room was lit by two windows apiece in both north and south walls, and had access to a latrine in its south-west corner. It was also heated by a small fireplace in its north-east corner (partly under the modern stair), whose flue vented through the eastern reveal of the large window above. With the conversion of one of its northern windows into a door, presumably later in the Middle Ages, this room would have communicated with an adjacent structure, possibly a kitchen.

The presence of the defensive mechanisms in the central room demonstrates that the first floor must be interpreted, at least in part, as a space for the castle's garrison, guards or officers of the castle. Given the apparent similarity of the two rooms in the drum towers and the supposed presence of entrances from both of them into the central room, it is impossible to distinguish individual functions for either. It may also be observed that at no point does there seem to have been access from this floor directly onto the curtain wall.

The second floor was accessible by spiral stair in the north-east angle and formerly also by the north-west stair. A doorway off the eastern room gave access to the wall-walk a storey below via a timber stair that was presumably removable or retractable, but the evidence is less clear on the west. The second floor seems at first sight to have been occupied by one large room running the complete length of the building. No unequivocal evidence survives in the fabric for east-west partitions separating out the half-octagonal frontages of the drum towers, nor of north-south partitions dividing up the main space. The form of the eastern tower survives almost complete and indicates that a niche was created underneath a broad segmental arch, apparently opening into the main body of the building; though the evidence for the western tower is less well preserved, it seems likely that a similar arrangement pertained at this end.

However, it is clear from minor differences in the fenestration of the drum towers and the main north elevation, that the eastern and western ends of the second floor were treated differently and probably functioned differently. The eastern tower was lit only with single-light windows, but the evidence of the western tower strongly suggests that at least one window contained two lights, similar to those on the floor below. The superior lighting of the western end of the building can also be seen in the north elevation, where the jambs of two tall windows can be seen in the western part, corresponding to a single large window in the eastern half: the north elevation was therefore asymmetrical. The western windows contain glazing grooves: the window to the east was merely rebated above and below the transom. Moreover, the forms of the windows appear on close inspection to have been slightly different, with true 'Caernarfon' heads to the western pair of windows and the simple angular form in the single eastern window. This floor was possibly provided with a latrine in the west wall (though this area is now inaccessible) and another to the south, in the thickness of the west drum tower wall. Only one fireplace can be seen: in the north wall, close to the north-west corner.

The evidence for fireplaces on this level is unclear. A small fireplace is built into the window niche in the eastern tower. A second is built into the north wall close to its western end. As will be argued below, the main body of this floor was probably occupied by a hall, for which no fireplace can currently be identified, though it might be expected to be large, given the size and importance of the room. Possibly it was heated by an open hearth or brazier in the centre of the floor, or alternatively by a wall-fireplace in centre of the south wall directly over the gate-passage. No fabric survives in this area to support or disprove this hypothesis conclusively, but it may be the most likely possibility.

The uneven provision of windows suggests that the second floor was divided into two spaces by a partition running north-south. This may have lain close to the centre of the building producing rooms of similar size but different lighting: alternatively the floor may have been divided towards the western end, between the two windows whose outer jambs are now the sole surviving evidence: this seems most likely. These two spaces should be interpreted as the 'hall and great chamber of the tower called 'dungeoun"' mentioned in 1440 with the hall occupying the eastern part of the building, the chamber the western (PRO: DL 29/361/5976: see also 5983). The presence of a 'hall' in the gatehouse is also recorded in the 1350s (Bodleian Library MS: Yorkshire Rolls, Box 1, no 2: '*...cum stipendio i carpentarii ponendis super parvos turres supra aulam ultra portas...*'). The access arrangements confirm this; the entrance from the north-east spiral stair into the second floor is a large and imposing doorway of two orders; by contrast, access into the western half of the second floor was contrived only by a narrow dog-leg passage in the thickness of the west wall, beside the latrine. This indicates that the more public 'hall' lay in the eastern half of the building: the more private and better-heated 'chamber' to the east. The latrine in the thickness of the western tower would stand immediately adjacent to the dais at the high end of the hall.

The existence of a chapel is first documented in 1351 (PRO: Ministers' accounts 1349-51). It may well have been contained within the gatehouse, given the self-contained design of the structure as a whole, but, if so, its location is unclear. Various other locations have been proposed, including an unidentified building (perhaps the so-called 'grange') near the Egnycleugh Tower (Hutchinson 1778, 187-8), the largest of the suite of buildings added to the rear of the Constable's Tower and the tower at the north-east corner of the mantlet (Bates 1891); the latter can be discounted since the mantlet was not added until 1380, while the room to the rear of the Constable's Tower is aligned north - south.

Above this level, as described in detail in Section 8.1.4, the north-eastern and probably also the north-western spiral stair continued above the lead roof and provided access onto it. No sign of a door onto the leads can be detected in the fabric, but it is clear that the stairwell continued up to this height, lined in well-dressed ashlar. From here, it was possible to climb to look-out points on the two northern angles, or to cross the roof into shelters in the rear faces of the front turrets. Doors at this level also gave access into spiral stairs onto the roofs of the front turrets.

8.1.6 Changes to the fabric

The restoration work done in the 19th and 20th centuries (discussed in Sections 8.1.2 and 8.1.3), the poorly understood renovations carried out by Alice Craster at the end of the 16th century, and the supposed blocking of the gate passage (discussed in Section 8.3), are not discussed in this section. Apart from these, Thomas of Lancaster's gatehouse seems to have undergone few major changes and most of its architectural features date to the original construction. In terms of the function of the building, the most significant physical alteration was the conversion of a narrow opening in the north wall at first-floor level into a door. It is possible that this provided a secondary entrance into the building and was served by an external stair. However an alternative interpretation is that this door connected with the first

floor of an adjoining structure, presumably a timber-framed lean-to building running along the western flank of the north elevation. It would be unwise to speculate in too much detail about the form and function of this putative building; nevertheless, the suggestion that a kitchen for the gatehouse stood in this part of the enclosure in the late 14th century has much to commend it on functional grounds (Summerson 1993, 19). The construction of a building apparently called 'Kitchentower' (...*factura unius turris vocat' kechyntour*) is documented in receiver general's accounts dating to somewhere between 1416 and 1420 (PRO: DL 28/4/9). The presence of such a building would imply that the chimney of at least the western porter's lodge had ceased to function or had been heightened; in its present (reconstructed) form, it would vent into the interior of the postulated building.

8.2 The development of the mantlet and John of Gaunt's gatehouse

The most significant changes to affect the gatehouse at Dunstanburgh Castle during its operation took place in the 1380s, during the lordship of John of Gaunt. These alterations, which are well documented in a sequence of contracts and orders for payment over three years, were re-evaluated by Malcolm Hislop (1995); his interpretation is summarized below.

Hislop's first identified phase began in October 1380, when the mason John Lewyn was contracted to build 'a mantlet of freestone around the gatehouse.'

...un mantelette de freeston en certain lieu, a lui devise par le dit Johan roy et duc et son conseil, entour le grant tourre deinz son chastel de Donstaneburgh contenant en longure par estimacion unsze rodes, et serra le mure le dit mantellet en haut dessus la terre vynt pees dassise ove le bataillement, et en lamont quatre pees dassyse parmy et par tout...

This mantlet, which was completed by July 1381, was 11 rods long, 4 feet thick and 20 feet high (55.3m x 1.2m x 6.1m). Hislop argued that the interpretation of this feature by most previous researchers, as the enclosed approach to the gate in the west curtain wall, termed John of Gaunt's gateway in this report, must be wrong: this wall is only 50m long and built in rubble rather than freestone as specified (this last point is erroneous: as elsewhere, the freestone facing of the wall has mostly been removed, leaving only the rubble core of the wall intact). Hislop's suggested alternative interpretation of the mantlet was the wall defining the rectangular 'inner ward' on the rear (north) side of the great gatehouse. This enclosure was provided with an opening in its north wall, almost directly opposite the main gateway of the gatehouse, leading outwards towards the Lilburn Tower, which lay in a virtually straight line beyond. The width of this opening, subsequently blocked and built against, can be reconstructed as about 3m from the size of stones in the plinth and roughly vertical joints in the masonry. Omitting the rectangular tower at the north-east corner of the enclosure (an addition in the second phase) and allowing for the opening in the north wall, the wall of this enclosure would be within 1m of the estimated length specified in the contract.

The letter of July 1381 instructing payment of John Lewyn for his work on the mantlet also mentions payment for another completed work, whose nature is not specified. Lewyn was to be paid at the same rate as for the mantlet, hinting that the work may have been the

construction of another relatively simple wall. This might equate to the blocking of the gate passage under the great gatehouse, which Hislop thinks did not occur until the phase of work initiated in July 1383, as described below.

In December of 1381, a second phase was initiated, with the commissioning of a new mason, Henry Holme. This development had previously been interpreted as a seamless continuation of work planned and begun by John Lewyn (Harvey 1984, 183), but Hislop's research pointed to a more incremental sequence of changes, possibly in reaction to the unrest of the summer, during which John of Gaunt had been forced to seek refuge from the peasants with his rival, the Duke of Northumberland. Holme was commissioned to fortify the enclosure and provide new buildings inside it.

*... la fesure de sys mesons ove sys voutes, sys chemenoyz et fenestres
appurtenantz as ditz mesons, et pur la fesure dune entrée et une gatehouse
ovesque une voutee et un porteculys et une vice...*

(Lodge and Somerville 1937, 284)

Holme's contract provided for the construction of six vaulted buildings, remains of several of which may still be seen, with chimneys and windows, and a vaulted gateway, with a portcullis, and a 'vice' (that is, spiral stair) leading to an upper floor. This gateway is interpreted as the opening in the east wall of the mantlet (adjacent to the present custodian's hut), which was subsequently narrowed; part of the groove of the portcullis survives. The tower adjoining the new gate on its north side retains evidence of its vault, and traces of a doorway, perhaps leading to the documented vice, at its south-west corner, immediately inside its entrance door. The upper storeys can be seen in Francis Place's 1678 drawing (Figure 5). In this, it appears to be virtually intact, with a slim, battlemented turret projecting above the main two-storey tower, presumably at its north-east corner. According to Hislop, Thomas of Lancaster's gatehouse still remained the principal entrance to the castle at this stage, with the Egyncleugh Tower as a major postern entrance at the eastern end of the south frontage.

In 1538, among the recommendations for improvements and repairs in the castle was the provision 'Item there would be an iron gate for the inner ward of 3 yards and a quarter high, and 3 yards broad, which will cost for iron and making 14 pounds.' Where the term 'inner ward' is used in the following 'item' and elsewhere in the document, it can be interpreted securely as John of Gaunt's mantlet. The size of the opening which the new iron gate was to fill (2.75m wide by 3.00m high) corresponds sufficiently closely to the original width of the narrowed gateway (2.55m or 2.77 yards) to confirm that this was the gateway referred to (Society of Antiquaries of Newcastle 1885-6, 79-80). It follows that the gateway was narrowed to its present width of 1.3m, in masonry of relatively high quality, at some point after 1538. This modification can only relate to the residency of Alice Craster from 1594 until her death in 1597. Other modifications, such as the insertion of the floor into the eastern porter's lodge and the transformation of the north-facing windows of the lodges into doors, might belong to this period, but physical evidence for this phase of the castle's use is generally difficult to identify.

Again according to Hislop, this phase of Holme's work also entailed the blocking of the northern entrance through the mantlet. The 2003 survey (and indeed previous surveys) demonstrated that the scarp defining the southern side of the cutting ascending from John of Gaunt's gateway turned to approach the western side of the blocked opening. If Hislop is correct in his belief that the northern entrance through the mantlet was blocked at this time, as seems very likely, the relationship with the earthwork would seem to indicate that there was already a gateway of some importance in existence on the site of 'John of Gaunt's gateway' prior to his works there in the subsequent phase. This issue is discussed further below.

The third and final stage involved, according to Hislop and others, a complete re-orientation of the castle. Holme's works of the second phase only finished in July 1383, but they were followed by a further contract in which the mason was committed to build another gatehouse of freestone with a portcullis, barbican, postern and drawbridge.

...une nouvelle gatehouse de frestone a le chastel du dit roy et duc de Dunstaneburgh et pur renuer les vowzers, jambes et barbicans illoeqes et pur prendre la veille gatehous illoeqes pur eyder al oevereyne del nouvelle gatehouse susdite, et meisme le gatehouse serra vowtez et avera un portculys, un barbican et un posterne et une ordenance pur un pont affaire en meisme loevereine...
(Lodge and Somerville 1937, 292)

Hislop convincingly interpreted these instructions as pertaining to the series of structures collectively known as John of Gaunt's gatehouse, standing on the western flank of the castle, directly overlooking the approach from Embleton (Figures 17 and 18). The contract



Figure 17.
The remains of
John of Gaunt's
gatehouse

makes no firm mention of whether there was a tower or any other feature standing on this site before the works of 1383, though it stipulates the 'renewal' of the barbicans and the taking of materials from an 'old gatehouse', conceivably one standing at this point (rather than Thomas of Lancaster's gate or more probably its barbican, the other most obvious interpretation). As discussed above, the earthwork evidence indicates that the gateway in the northern wall of the mantlet and a gateway on the site of John of Gaunt's gateway were in contemporary use, from which it can be inferred that there was some fairly important precursor to what is usually called John of Gaunt's gateway.

The evidence of the surviving masonry is not conclusive on this issue. On the south side of John of Gaunt's gateway, the inner face of the 1313 curtain wall, preserved behind the abutting mantlet, continues almost to the edge of the gate passage. The outer face, on the other hand, cannot be traced this far, but it is unclear whether this results from the thorough robbing of the facing stone or whether the face originally turned outwards, to form a tower similar, or indeed identical, to the supposed later one. On the northern side of the gate passage, the 1313 curtain wall contained an angle, of which a single internal coign is preserved within the northern tower of John of Gaunt's gatehouse. This angle was evidently accompanied by an external tower, part of whose northern side survives intact. Assuming that the western face of the tower was straight and extended for an equal distance to the

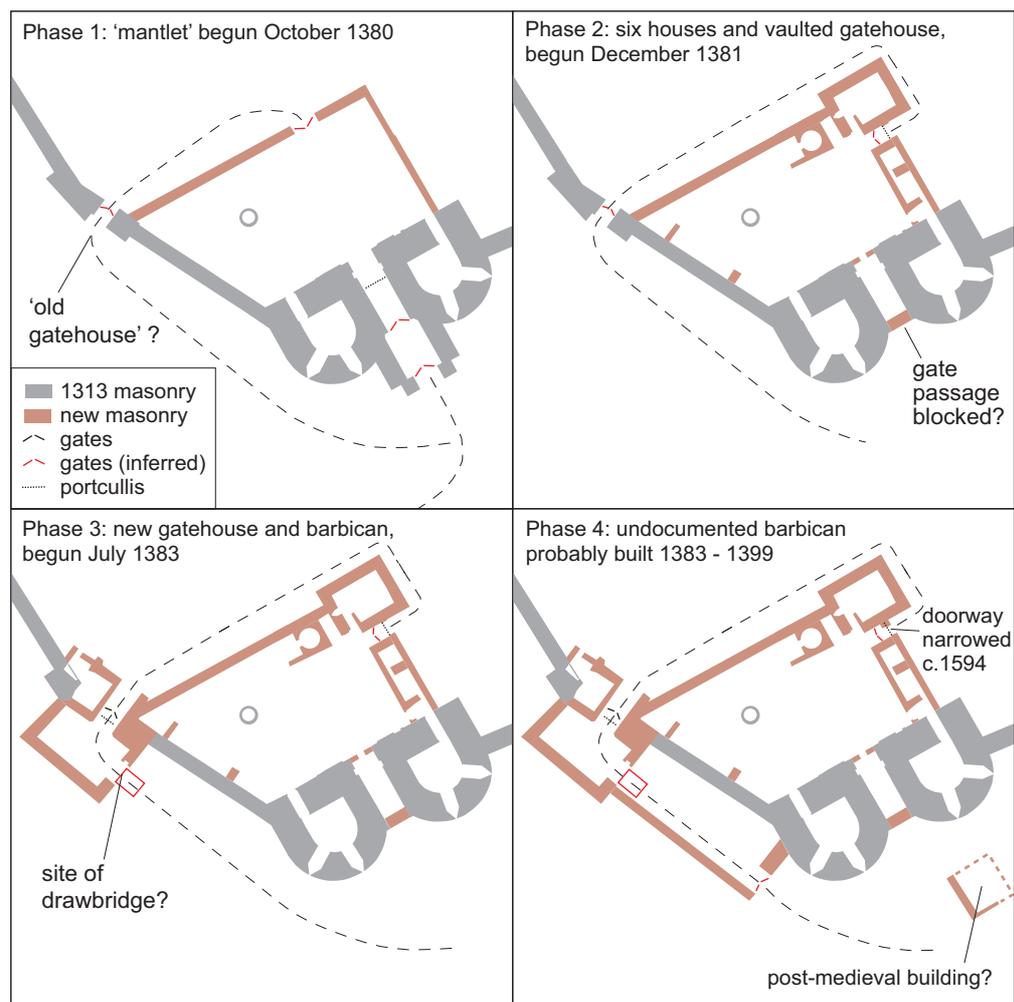


Figure 18.
Conjectural phases
in the development of
the gatehouses and
inner ward
(1:1 000 scale)

south of the angle, as at Huggam's Hoose, the next mural tower to the north, the putative early entrance could still have been similar in size to John of Gaunt's gateway, in other words, larger than a minor postern.

Holme evidently demolished the southern half of this tower in order to create the barbican and a larger tower, whose ground-floor room cuts into the solid core of the earlier tower. The south-western frontage of the barbican, which today survives only as foundations, must already have been lost by 1678, for the large, arched gateway itself is revealed on Francis Place's drawing. However, the drawing depicts the tower standing to its full height. It was slim, but three storeys high (apparently more than half the height of the great gatehouse, or very approximately 10m). Grooves survive in the gateway to indicate the position of a portcullis, with a rebate immediately behind them indicating the position of inward-opening gates. The position of the drawbridge specified in the contract is uncertain, but may have been accoodated by the rebate in the south-facing wall of the barbican. In summary, it seems that this part of Holme's work comprised the adaptation and extension on a slightly different orientation of an earlier, simpler mural tower on the north side of the gateway.

The 25m-long passageway, which extended south-eastwards from the barbican parallel to and overlooked by the main curtain wall, abuts the barbican, indicating that it post-dates the latest documented phase of Holme's work. It seems probable, however, that it too was added under John of Gaunt's direction. This structure, like the barbican, now survives only as foundations.

John of Gaunt's gatehouse never attained any great size, and even with its fortified approach, secondary gates and all, would not have succeeded as a ceremonial or inspiring feature: its size marks it out as primarily functional, a means of access. Yet, even with the cutting leading eastwards from the gate, the steepness of the route and the sharp turn required to enter the gate would have made it difficult for wagons to negotiate.

8.3 Access into and around the castle's interior

The gate added in the second phase of John of Gaunt's works, communicating between the inner ward and the eastern side of the outer ward, clearly opened against an approach from the east; in other words, it protected the inner ward against entry via the outer ward. During the second phase of Gaunt's works, according to Hislop, the only major independent entrance to the outer ward certainly wide enough for mounted and some vehicular traffic was the gateway beneath the Egyncleugh Tower and even then, the gateway there was too narrow to allow larger carts and would have forced anyone on horseback to bend low, if not to dismount. In addition, as mentioned in Section 8.4.1, the earthen rampart opposite that gate shows no sign of wear, as though it was seldom used. Perhaps it follows from this, as suggested in Section 8.2, that the supposed earlier gateway on the site of John of Gaunt's gatehouse was also large enough for vehicular traffic, but that cannot be proven on the available evidence.

It is necessary to labour the point about access around the castle, because the works of John of Gaunt have been assumed by all previous researchers to involve the blocking of the

gate passage of Thomas of Lancaster's gatehouse. As a result, according to previous researchers, Dunstanburgh's old gatehouse became redundant as a point of entry in 1383 and was re-designated purely as a keep. This change would not be without parallel; a similar infilling of the main gate and the construction of another beside it can be seen at Llansteffan Castle, Carmarthenshire (Humphries 1996). The construction of the new gatehouse and the creation of a fortified inner ward, with the old gatehouse at its heart, turned Dunstanburgh into a 'concentric' castle with a *donjon* for the lord in the most protected part and other essential offices for the castle, including the bakehouse and well, secured within the inner ward.

However, the basic assumption on which this argument rests is not unequivocally supported by either the documentary or the physical evidence. The blocking of the gate passage with stone would have been a major undertaking, yet it is not explicitly mentioned in any of the contracts or other documents. The most convincing documentary evidence that it occurred is a change in nomenclature. From being 'the tower over the gates' (*turris ultra portas*) in the early 1350s, the gatehouse was renamed '*donjon*' by the 15th century and the same term is used in the surveys of 1538 and 1543 (Bodleian Library, Yorkshire Rolls, 2, translated in Bates 1895, 26-29). Though *donjon* does not conclusively demonstrate that the gate-passage was blocked, the term would certainly be unusual for a functioning gatehouse. The 1538 dilapidation survey likewise mentions numerous spaces within the *donjon* without mentioning that it served as a gate: John of Gaunt's gate is, however, mentioned as the 'outer gate'. Most compelling of all is the 1543 survey which lists the buildings of the castle in order, 'to begin at the gatehouse westward and so go round about the castle.' It is clear from the wording that this survey begins immediately north-west of John of Gaunt's gate, proceeds clockwise to 'the tower called Lyleburne' and so on, finishing with '2 great towers with a house going between them, both which is called the dongeon tower' containing 'two floors very well timbered', followed by John of Gaunt's gate: 'the gate house of the said castle is fallen down wholly, except five posts (beams) that hangeth over the said gate, which are like to fall every day.' The implication of this survey is clear: the gatehouse of Thomas of Lancaster was no longer perceived as a gate for the castle, a term reserved for the postern in the Egyncleugh Tower and the collapsing gate built for John of Gaunt.

Hutchinson's fairly detailed description, written in 1776, refers to 'a portico and interior gate' and gives no suggestion that a blocking wall existed (1778, 187-8). In addition, the accompanying engraving clearly shows the passage with light coming through from behind. On the other hand, his observations are not always to be relied upon: he erroneously interpreted the breach in the curtain wall west of the Constable's Tower as an original postern, while his engravings undoubtedly use some artistic licence. The oil-painting by JMW Turner, first exhibited in 1798, shows what appears to be a rough stone blocking within the outer end gate-arch as high as the springing, though not entirely filling the opening (produced in Bryant 1996, 65). A member of the Newcastle Society of Antiquaries who visited Dunstanburgh in the mid-19th century described the 'broad gloomy gateway' of Thomas of Lancaster's gatehouse, without any hint that it was, or had been, blocked (Northumberland CRO).

The evidence in the surviving fabric is inadequate, because the inferred extensive masonry repairs to the gateway in the mid-19th century make it possible that any evidence for a genuine medieval blocking that once existed could have been removed in recent times. Indeed, Honeyman, who directed excavations in 1930-1, stated that this was done in 1885 (Hunter Blair and Honeyman 1947, 4), but does not appear to have been referring to a medieval feature. Crucially, the photograph by JW Robinson which shows the gate passage at close range (see Figure 6) was taken in 1884 – the year before the blocking was reportedly removed. As discussed in Section 8.1.2, the masonry depicted on the photograph indicates that the most extensive remodelling had already taken place. At the outer end of the gate passage, the photograph shows a rough, drystone construction only a few courses high, with a central opening; this was probably removed in 1885, but is probably not the wall referred to by Honeyman. From the photograph, it seems to be no more than a barrier built in fairly recent times to create a shelter or pen for livestock within the gate passage. Conceivably, this could be the same feature depicted in a less dilapidated condition by Turner, and could have been ignored by Hutchinson and the mid-19th century antiquarian simply because it was so obviously a recent addition. Alternatively, it may not even have existed at that date, but if a genuine blocking wall had been removed by Sutherland in the mid-19th century, it is curious that he then permitted such a rough drystone wall to spoil his restoration work so soon after its completion.

There is, however, evidence for well-cut tothing in both the drum towers, marking the ends of missing walls that evidently projected at about 45 degrees into the space in front of the gateway. The addition of walls in this unusual arrangement, which may be contemporary with the removal of the barbican, is clearly not a straightforward way of blocking the opening and is difficult to explain.

On the other hand, the 1884 photograph shows a better constructed wall at the inner end of the gate passage, visible only in silhouette, but apparently constructed with mortared, squared blocks of stone; this is apparently the wall referred to by Honeyman. The same feature is visible on another photograph of similar date which shows the rear of the gatehouse and, more clearly, on a late 19th-century drawing. This wall also seems to have had a central opening approximately 1.6m wide. Physical evidence for the quality of the construction survives in the form of tothing in both sides of the inner archway of the gate passage. This potentially medieval wall was evidently removed, at the same time as the outer post-medieval drystone walling. If it indeed blocked the passageway, it can only have worked in conjunction, in some way, with the barbican, whose precise form remains unclear.

8.4 The mural towers and curtain walls

8.4.1 The Constable's Tower, Egyncleugh Tower and south curtain wall

From the 1350s onwards, documents make it clear that the constable of Dunstanburgh was provided with a building complex of his own, separate from the suite inside the gatehouse. In 1446-7, references to slates or roof-tiles (*sc/atti*) confirm that this was not the gatehouse, which has always been roofed in lead (PRO: receiver's accounts DL 29/361/5978; Cambridge 1986, 27). As concluded by all previous researchers, this complex, 'the hall and constable's

chamber' or 'the constable's hall and buildings adjoining it', was almost certainly the set of domestic buildings adjacent to the 'Constable's Tower'. The 1989 geophysical survey, although perhaps overly optimistic in its detailed interpretation of the data, suggests that the foundations of other buildings survive below ground (Titman 1990). The earthwork traces and geophysical survey both seem to confirm that there was formerly an enclosing wall, whose foundations also survive beneath the turf, running from the north-west corner of the constable's lodgings to the north-east corner of the inner ward, as first suggested by Cadwallader Bates (Society of Antiquaries of Newcastle 1885-6, 80).

In 1458-9, the Egyncleugh Tower, also sometimes known as the Margaret Tower, was apparently called the Elgyntour, suggesting a possible Scottish association (PRO: DL 29/361/5984; Hunter Blair and Honeyman 1936, 17; Hunter Blair 1949, 26). However, this may



*Figure 19.
Egyncleugh Tower,
seen from the south*

be a mis-spelling for 'Egyncleugh' would translate straightforwardly as 'eagle's ravine' in local dialect. Bates states that the inner (north) doorway is a restoration (Society of Antiquaries of Newcastle 1885-6, 82) and this is supported by the presence of several 'rusticated' facing stones similar to those associated with the restoration of the great gatehouse. However, the dimensions appear to be faithful to the original, since the opening matches the 1.4m-wide outer gateway. The rebate for a 4.8m long drawbridge, which spanned the rock-cut dry moat, is visible in the outer face of the tower (see Figure 19). Although the gateway is broad enough to have allowed access by small vehicles or hand-carts, the unworn condition of the earthen rampart on the opposite side of the moat suggests that the gateway was seldom used by vehicular, or even pedestrian, traffic. In passing, it is worth noting that the limited and irregular quarrying into the bedrock of the moat suggests that an initial plan to extend the quarrying throughout the moat was abandoned at an early stage, perhaps due to the intractable nature of the basalt.

The final observation on the Egyncleugh Tower is perhaps best left to Cadwallader Bates (1885-6):

No better example perhaps exists of the utter inability of the medieval mind to appreciate the romantic scenes in which, for practical reasons, the buildings of those centuries were often placed, than the way in which the east side of the Margaret Tower, commanding a scene of singular majesty, was wholly devoted to latrines.

8.4.2 The Lilburn Tower and west curtain wall

The architecture of the Lilburn Tower has been adequately described by previous researchers (Bates 1891, 190-1; Hunter Blair and Honeyman 1936; Summerson 1993, 20-22). According to the survey of 1538, it was then in good repair, though lacking its lead roof (PRO E 36/173, 61-3; Cambridge 1986, 33). Following a lightning strike on the north-west turret in June 1885, the tower was repaired and the adjacent postern gate unblocked (Society of Antiquaries of Newcastle 1885-6, 81; Bates 1891, 191).

The tower is now usually agreed to have been begun by Thomas of Lancaster but completed under the direction of one of his retainers, John de Lilburn, who was given control of Dunstanburgh after Lancaster's execution in 1322 (Summerson 1993, 20). However, this surmise is based almost entirely on the name of the tower, first documented in the 1538 survey, and as such is really no more reliable than the earlier suggestion that Lilburn had initiated the construction work himself (Bates 1891, 190; 1895, 213; Hunter Blair and Honeyman 1936, 16; Douglas Simpson 1949, 15). Setting the documentary evidence to one side, the quality and style of the architecture suggests that the tower may have been entirely completed in the first phase of building work, possibly some years before 1322. Contrary to Bates' (1891, 190) suggestion, at least one of the masons marks on the Lilburn Tower (the simple X symbol) is present on both the gatehouse and the Lilburn Tower.

On account of its elevated location and height of around 18m, the Lilburn Tower has often been interpreted as a watchtower, a purpose which it was undoubtedly well-equipped to



*Figure 20.
Lilburn Tower,
seen from the
south-east*

perform (Summerson 1993, 21). However, like Lancaster's great gatehouse, the 2003 investigation suggests that there may have been other factors involved in its siting and design. On a clear day, Bamburgh Castle, the royal stronghold 15kms to the north, is clearly visible even from ground level at this high point, making Dunstanburgh a constant reminder to the royal retainers that the Lilburn Tower would have greatly enhanced. As noted in Section 8.1.1, it is worth pointing out that the westernmost turret of the Lilburn Tower lies directly on the axis of Thomas of Lancaster's gate passage. Admittedly, this is not likely to be entirely the result of deliberate contrivance, since other factors, including the natural topography, influence the positions of both the Lilburn Tower and the gatehouse. However, even if only by fortunate coincidence, the Lilburn Tower would have been framed by the archway of the great gatehouse when the gates were open, especially prior to the addition



*Figure 21.
Lilburn Tower, seen
from the south-west,
during flooding in
February 2004*

of John of Gaunt's mantlet. Gaunt's initial retention of a gateway, subsequently blocked, in the northern wall of the mantlet may have been, in part, an acknowledgement of this quality.

The elegant design of the tower, which the first site guidebook justifiably described as 'picturesque' (Hunter Blair and Honeyman 1936, 8), needs to be understood in the context of the newly discovered North Mere, which would have offered stunning reflections of the architecture for several hundred metres along the final stretch of the approach to the western gateway through into the outermost ward (Figure 21; see Sections 8.7 and 8.8).

The visually striking natural pillars of basalt which surround the outcrop that forms the foundation of the Lilburn Tower have received little academic interest, though they feature in local folklore and are regularly commented upon by visitors. As Cadwallader Bates (1891,

167) observed in 1891, 'You almost expect to be challenged by the basalt giants that are drawn up like so many warders round the base of the stately Lilburn Tower'. The pillars have been referred to by some as 'the hanging stones' (Meeting of 'The Northumbria Mysteries Group' at Dunstanburgh, Spring 1985). It is unlikely that the Lilburn Tower owes its location entirely to the presence of these natural pillars of rock, given that it also occupies the highest point of the headland. Yet their retention by the builders deserves consideration, especially because the exposed stone could so easily have been quarried away for use in the core of the curtain wall or tower. The presence of the pillars must have been inconvenient for the builders and their retention created the only location around the curtain wall where attackers could potentially have found protection from the battlements. In the light of this, it seems reasonable to conclude that the pillars were deliberately retained to achieve an aesthetic effect akin to that remarked upon by Bates.

Previous researchers have struggled to explain the existence of the postern immediately to the north of the Lilburn Tower (Summerson 1993, 22). Its role can be better understood in the context of the newly discovered outer perimeter and specifically the gateway in the earthwork at the northern end of the North Mere (Section 8.6). An eroded footpath that descends the escarpment obliquely from the postern towards this northern outer gateway would seem to be of much greater antiquity than its condition would at first suggest. The blocking of the postern may well date to the years after 1458, when comparable operations were carried out on the east curtain wall in advance of the conflicts of the Wars of the Roses.

An amorphous lump of stonework, the remains of a mural tower, is located at a slight change of angle between the Lilburn Tower and the great gatehouse. Francis Place's drawing of 1698 (Figure 5) shows the tower virtually intact, with two storeys plus battlements, standing around 8m tall, a few metres higher than the top of the curtain wall. The drawing also shows some of the battlements between the tower and John of Gaunt's gatehouse surviving. Only the foundations survive today, and even these have been stripped of their ashlar facing; evidence for the concerted stone-robbing, particularly of the west curtain wall, is described in Section 8.12.

Research by Katrina Porteous records that older fishermen who used the castle's towers as navigational landmarks, such as Bill Smailes of Craster, referred to the stump of the mural tower as 'Huggam's Hoose' (that is, 'house'), though it now offers no shelter at all, while the Lilburn Tower was sometimes called 'The Iron Bar Tower'. In 1861, an Ordnance Survey triangulation station was sited on the foundations of the curtain wall, approximately mid-way between the two towers (Ordnance Survey 1866).

8.4.3 The east curtain wall

The east curtain wall is built predominantly using small, undressed pieces of limestone, which were almost certainly quarried nearby, since limestones and sandstones make up the local geological strata into which the Great Whin Sill later intruded. The wall is built in a maximum of seven segments apparently of fairly regular length (two of 37m (40 yards) and

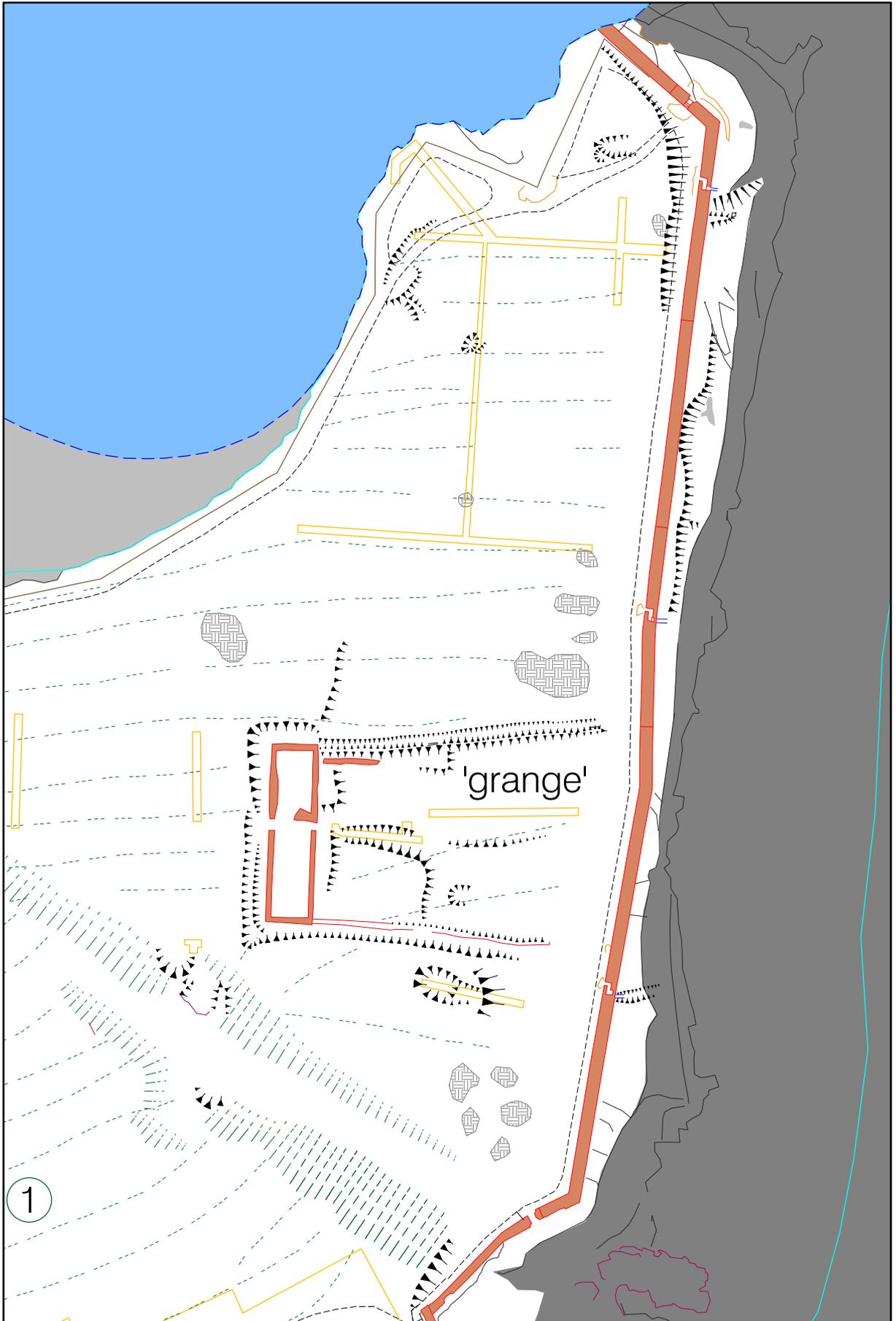


Figure 22. Plan of the east curtain wall and possible 'grange' (1:1 000 scale)

the rest up to 47m), suggesting that the work may have been done by separate teams of builders, or perhaps episodically. As suggested previously, this may represent the contribution demanded of the local community (Summerson 1993, 24). Peasant farmers would presumably have been allowed to fit the work around the requirements of the agricultural cycle, so it is possible that the wall is the product of labour during the winter months. The original wall walk was 3.3m above the external ground level, with a parapet 1.5m higher. Its comparatively low height must reflect its relatively insignificant contribution to the defence of the headland at that date, prior to the development of effective naval guns. Repairs to 'the wall next to the sea' are documented in 1428-9 (PRO: DL 29/361/5971-2).

The wall walk was eventually infilled to the height of the top of the parapet, and thus preserved almost intact, when the entire wall was raised using basalt boulders. As suggested by Hunter Blair, this modification may equate to the 'building of a new wall next to the sea' documented in the Receiver's Accounts of 1458-9 (PRO: DL 29/361/5984; Hunter Blair and Honeyman 1936, 17; Hunter Blair 1949, 26). Certainly, the easily identifiable 'postern between the tower called Elgyntour and the sea' was constructed at this date, and there has been extensive quarrying of the exposed basalt on the foreshore immediately outside the gate. The width of the postern was evidently narrowed by a slight extension of the wall on the north-east side, which could indicate that it was initially created wide enough for use by carts, in order to shift the quarried stone. The raising of the curtain wall may therefore have been carried out rapidly by Sir Ralph Percy, who had taken over command of Dunstanburgh in 1457, in anticipation of the inevitable involvement of the castle in the Wars of the Roses in the 1460s. By that date, the damage that could potentially be inflicted by gunfire from the sea was an important consideration, which it had not been when the castle was first built.

Three latrines, were built into the thickness of the wall at almost equal intervals of 70m-75m, presumably for use by temporary occupants of the outer ward, as suggested previously (Summerson 1993, 24). The location is practical, for prior to the accumulation of a narrow beach immediately in front of the curtain wall, the base of the wall may occasionally have been washed by the sea.

A postern gate, well built using sandstone blocks, gives access to the foreshore at the very tip of Castle Point. Though the lowest courses of sandstone overlie several courses of limestone masonry, it seems unlikely that the insertion of the postern post-dates the construction of the curtain wall by long. Since the only other gate in the main curtain wall that gives direct access to the sea was certainly added in the 15th century, as described above, this gate may equate to the 'Watergate within the castle' (*Wat'gat infra castrum*), the cost of whose construction, apparently from scratch, was documented in 1367-8 (PRO: DL 354/5837). There are two obvious possible functions for a postern in this location. Firstly, according to local people, the adjacent part of Gull Crag offers one of the best places for fishing in relatively deep water along the whole of this stretch of coast. Secondly, while landing a small boat on the rocky foreshore would have been difficult in even calm conditions, it would be possible to bring a fairly large ship close to Gull Crag when the wind is in the south-west. This would have offered an option for resupply and escape.

8.4.4 The alleged north curtain wall

According to the 1543 survey, the north curtain wall was at that date 'sore decayed, by reason of the sea... and the castle wall on that side was never in height above 2 yards and a half (2.3m), and upon that side there is no manner of a tower'. Summerson (1993, 22) takes the 1543 survey at face value and suggests that the lost wall may not have been defensive, but primarily a barrier to prevent the death of livestock. Today, the curtain wall is truncated at both its northern ends where it meets Gull Crag, indicating that some degree of erosion has certainly taken place. However, there has been no appreciable change since the coastline was first accurately mapped in 1861, so it is difficult to estimate how much of the defensive circuit was lost prior to this (Ordnance Survey 1866). The tone of the 1543 survey suggests that the dimensions represent an estimate based on surviving fragments; the statement cannot therefore be taken as absolute proof of the existence of the wall. Bates believed that the wall had terminated with a tower at the edge of the cliff (Society of Antiquaries of Newcastle 1885-6, 81; Bates 1891, 191).

8.5 The interior of the outer ward: the 'grange' and other features

Even after the possible loss of land caused by almost 700 years of coastal erosion on Gull Crag, the area now contained by the curtain wall (4.02ha or 9.96 acres) is the largest of any castle in Northumberland. The ground modeling of the site undertaken in 2003 confirms that this immense expanse is primarily a consequence of the pragmatic incorporation into the perimeter of the steep escarpment below the west curtain wall and the narrow neck created by Queen Margaret's Cove, as first pointed out by Hunter Blair (1949, 26). The line of the south curtain wall may well coincide closely with the putative Iron Age rampart, whose course must also have been heavily influenced by the topography (see Section 7.1). Therefore, the size of the outer bailey is not necessarily a reflection of the purpose for which the castle was originally intended, as has been suggested repeatedly in the past (for example, Summerson 1993, 7 & 24).

A broad bank up to 0.5m high runs from a point on the curtain wall just south of the Lilburn Tower southwards towards the eastern side of the blocked gateway in the northern wall of John of Gaunt's mantlet. Some 20m short of the mantlet, it turns a right angle to the east and ends after 8m. This abrupt termination hints that the earthwork may have been modified or that some of it has been truncated, perhaps by the ploughing in Field 1; in either case, its interpretation is rendered more difficult. In the later 19th century, the north – south stretch of the bank was followed by a path, which is depicted on two map editions but subsequently omitted (Ordnance Survey 1866; 1897). The earthwork does not seem to represent the overgrown foundations of a wall, for where sectioned in the 1930-1 excavations it proved to be unstructured mass of earth and rubble (Bosanquet 1936, 282). Perhaps, the bank was topped by a timber palisade or other superstructure. In any case, it appears to have formed the boundary between a tract of ridge and furrow cultivation to its east (Field 1) and two or three adjoining enclosures to its west. The interior of the northernmost enclosure, with an area of 0.06ha (0.14 acres), is raised to almost the same height as the top of the bank. Within the central or southern enclosure, which has an internal area of 0.23ha (0.67 acres), are slight earthwork traces of as many as four possible rectangular buildings, whose size

and plan suggest them to be components of the castle. There may have been a third enclosure of similar size occupying the area to the south and extending up to or even beyond the mantlet.

Interpretation of the boundary depends heavily on its date. If it predates the construction of the mantlet in December 1381, this enclosed area could conceivably have been an early inner ward immediately behind the great gatehouse, accessed both through the main gateway and through the supposed major postern on the site of John of Gaunt's gateway. If it postdates the mantlet, it could have formed another stage in the succession of spaces between John of Gaunt's gateway and the redesigned *donjon*, providing an intermediate outer ward, with or without access to the larger expanse of the interior of the castle. If later still, the boundary becomes even more difficult to interpret. Bosanquet, commenting on his own excavations, stated that the ground to the west of the bank 'has unmistakably been a garden, and trenching has reversed the original stratification'; no other supporting evidence is given (Bosanquet 1936, 282). Apart from the irregularity of their plan, the surface remains are not particularly suggestive of a garden layout, although the flat-topped mound immediately south-east of the Lilburn Tower could conceivably represent a viewing platform. In spite of the paucity of documentary and physical evidence for Alice Craster's three-year residency in the castle, the potential implications of this episode should not be ignored.

The only other buildings in the interior of the castle are the foundations of a rectangular building, 30.0m long by 6.6m wide internally, with an adjoining rectangular enclosure of 0.18ha (0.44 acres), also apparently walled, and ditched on the exterior. Both structures were subject to limited excavation and reconstruction prior to 1930, while Bosanquet inconclusively excavated several more trenches within and around the enclosure in 1931 (see Figure 9). On the other hand, the wall-lines have been depicted without significant change on Ordnance Survey maps since the mid-19th century, suggesting that the reconstruction was not heavy-handed (Ordnance Survey 1866; 1897). Early interpretation of this enclosure as a Roman camp 'with streets from side to side and end to end' is best disregarded (Abbott 1930). It remains a plausible suggestion that the building represents the oak-framed 'grange' rebuilt in 1454, according to the Receiver's Accounts for that year, and last repaired in 1470 (PRO: DL 29/361/5979; Hunter Blair and Honeyman 1936, 17; Bosanquet 1936, 282; Summerson 1993, 24). The weak, irregular walls, built of basalt boulders and rubble, are consistent with a timber-framed (possibly cruck-framed) building and the broad, opposed doorways in its long sides would be typical of medieval barns. More recent interpretations have been more cautious as to the function of the structure, suggesting that the whole complex may have been a medieval vegetable garden (Summerson 1993, 24). The relatively sheltered location of the enclosure, between the natural escarpment that runs across the middle of the outer ward and the east curtain wall, might support this interpretation. Given the ease with which timber-framed buildings could be extended by the addition of new bays, it is perhaps worth remarking that if the building were symmetrical on either side of the doorway, its dimensions would be close to those of the lodge built in 1313, according to the Engrossed receivers' accounts, for housing masons or other workmen (80 feet by 20 feet, or 24.4m by 6.1m) (PRO: DL 29/1/3).

The building and enclosure appear to overlie ridge and furrow cultivation (see Section 8.10), but this relationship does not greatly help to date their construction. Edmund Gibson, writing in 1695, refers to ploughing having occurred 'lately' within the ward, but the investigation has detected stratigraphic evidence that the castle was laid out over ridge and furrow cultivation (Section 8.10). With such ephemeral traces under rough grass, it is impossible to be sure which episode of agriculture the building post-dates, but there are slight hints that it may only postdate the later.

8.6 The outermost perimeter

The ground falls steeply from the west curtain wall to the edge of what would have been, prior to post-medieval drainage, an expanse of low-lying and boggy ground (see Section 3). To the south, the gentle slope down from the south curtain wall terminates abruptly in an eroded basalt cliff up to 8m high, now mostly overgrown with gorse. Together, these two natural features form a lengthy defensible barrier, but with a long gap to the south-west of the great gatehouse, where the gentle slope continues all the way down to the low-lying ground. The 2003 investigation shows that this long gap was barred by a substantial bank and ditch, and that smaller earthworks were constructed across the natural approaches at the north and south tips of the castle outcrop, to form a continuous outermost perimeter. The low-lying and naturally boggy ground beyond the perimeter was used to create a series of three meres linked by a broad moat, which was described in 1313 as the 'ditch between the site of the castle and the field of Embleton on the west side' (PRO DL29/1/3, roll 2). The meres clearly contributed to the definition of the perimeter, but served additional purposes and are therefore discussed separately in Section 8.7. In 1949, Douglas Simpson proposed that the perimeter, only part of which he recognized, may have defined a 'borough' (that is, a planned town), drawing a parallel with Scarborough's castle and medieval borough (Douglas



*Figure 23.
Trevor Pearson and
Stewart Ainsworth
recording the
earthwork that forms
the northern section of
the outer perimeter,
and the
northern gateway*

Simpson 1949, 7-13 and fig 2). This suggestion, together with Douglas Simpson's general argument that Dunstanburgh was planned on a more lavish scale than had previously been recognized, was effectively dismissed outright in a curt 'editor's note' that followed his article (Hunter Blair 1949). The 2003 investigation demonstrates that the outermost perimeter is both genuine and part of the 1313 design, again suggesting the existence of a planned borough, or conceivably a hunting park.

An earthen bank, presumably supporting a timber palisade or similar superstructure, was built to follow most of the natural perimeter. The bank was interrupted by three entrances, on the north, west and south. That on the west was apparently the most important, while that on the north is the best preserved. The bank reaches its broadest and a maximum internal height of 1.0m on the west, where the natural slope is most gentle, with a more pronounced outer face 1.6m high on average, augmented by a frontal ditch. Where it follows the edge of the low cliff on the south and south-west, the bank is less than half that size and in places absent altogether, apparently due to natural erosion. On the north-west, where the steep slope down from the main curtain wall falls straight to the track that skirts the foot of the outcrop before falling again to the former edge of the North Mere, there is no sign of any earthwork. It is therefore open to question whether even the supposed timber palisade would have continued further north than the western gateway. To the west of the northern entrance, though the bank stands only 0.6m high, the earthwork is a rather more impressive feature, reveted along both sides by roughly constructed drystone walling and fronted by a broad ditch (Figure 23). The structure of the bank is clearly revealed where the modern footpath cuts across the earthwork and has eroded away most of the earthen core. It is uncertain whether the flat-bottomed profile of the shallow ditch, now 0.3m deep, reflects its original form, as opposed to the silting which must have occurred after its abandonment. To the east of the northern entrance, the earthwork is very slight, but its course can be traced as a discontinuous line of facing stones running straight up the steep natural slope, almost to the line of the main curtain wall (visible in the background of Figure 23).

There is strong circumstantial evidence for the existence of a western entrance, probably with a gate tower, possibly built wholly or partly using basalt blocks and therefore of somewhat greater architectural pretension than the other two gateways. There are no visible remains which can be interpreted with confidence as remnants of the supposed gate tower, though the ground surface in the vicinity has the appearance of having been disturbed, so stone robbing may account for this absence of direct evidence. One or two large stones exposed in the side of a modern drainage channel may be elements of foundations and a localized concentration of basalt blocks lying on the surface could be interpreted as the residue from stone-robbing. However, the likely site can be more-or-less pin-pointed. On the exterior, a causeway, described in Section 8.8, carries the last part of a trackway which approaches from the direction of Embleton, finally passing between the northern end of the West Mere and the southern end of the moat.

The well preserved northern entrance, presumably formed by a timber gateway, is approached on the exterior by a slightly hollowed trackway. The entrance lies a few metres east of the

course of the modern footpath and has consequently escaped much of the erosion caused by walkers. Though it would clearly have allowed straightforward access into the outermost ward from the obvious route along the sea shore, two factors may have influenced its precise siting. Firstly, it faces directly along the storm beach that acted as the dam of the North Mere. Secondly, it lies immediately at the foot of the steep natural slope down from the main curtain wall, so that defenders on the wall would have completely dominated the entrance.

The supposed southern entrance may have been built in timber like its northern counterpart. Though its site cannot be pin-pointed with certainty, it probably stood on the line of the track that currently provides vehicular access to the castle from the south. The surface of this track retains patches of cobbling formed of beach pebbles, though here too, later modification could be suspected. The present track diverges from the edge of the eminence just within the supposed site of the gate, but a slightly hollowed trackway suggests that an earlier approach hugged the line of the perimeter for some distance to the north, rather than approaching the main gateway directly. Like the northern entrance, the southern gateway would have given access from the storm beach that offers the most obvious natural approach along the sea shore from the south. It would also have directly overlooked the site of the dock on the Nova Scotia beach.

8.7 The meres, 'moat' and fishponds

As early as 1720, Samuel and Nathaniel Buck suggested, in the caption to their engraving of the castle, that the sea had formerly entered the natural inlets on the north and south of the outcrop at high tide and that the construction of the 'moat' served to link these areas, periodically turning the castle outcrop into an island. This story is still prevalent among local people, but cores taken from the former area of the North Mere in 2003-4 prove conclusively that salt water has not entered that inlet for several thousand years (see Section 3). Yet the investigation undertaken in 2003 also shows that there is a nugget of truth in the traditional story: the castle was indeed surrounded by water, but in the form of three large, shallow, artificial lakes, or 'meres', in this report called the North Mere, West Mere and South Mere for convenience. Ground modelling of all these, as well as associated water features, was undertaken at a high resolution using survey-grade GPS (satellite mapping equipment which offers vertical accuracy of 5cms), in order to establish the likely water levels. All the meres were probably supplied with fresh water collected from a spring approximately 600m inland, via a simple but cleverly devised system of channels. Close to the spring, the stream is channeled through a narrow but well built stone-lined conduit, lying just beneath the surface but intermittently exposed to view. The rather elaborate form of this channel, which seems at odds with its size and remoteness, may indicate that it is of medieval construction.

The stream naturally flows into the low-lying ground north-west of the castle outcrop and water was retained here to form the North Mere (Figure 24), which covered an area of 2.25ha (5.56 acres). The dam was evidently formed by the simple enhancement of the natural shingle/cobble storm bank that extends northwards from the castle outcrop. The date of the event that created this bank, and its southern counterpart which retained the South Mere,

might be established using OSL (optically stimulated luminescence) dating techniques. Quartz and feldspar crystals should survive in any clay or sand layers under this bank and it would be assumed that they were effectively frozen, in terms of luminescent decay, when the shingle was dumped on top of them. As long as they were adequately bleached by sunlight during their life in the open a date should be possible. Such analyses could be expected to provide a date with an error of approximately 200 years.

A broad channel which skirts the north-western edge of the mere, but cannot be traced far into the field currently under arable cultivation, seems to have acted as a by-pass channel to conduct excess water directly to the sea. Parallels for this feature exist alongside the meres at Framlingham Castle in Suffolk and Kenilworth Castle in Warwickshire. The embankment on the south-eastern side of the channel, which separates it from the mere, has been slightly reduced by post-medieval ploughing, but still gives a reasonable guide as to the probable depth of the water in the mere. Traces of narrow ridge and furrow cultivation across the whole of the former extent of the mere (Fields 7 and 8) indicate that the ground had been effectively drained by the post-medieval period (see Section 7.12). and there have been subsequently been further attempts to drain the land, culminating in a network of deep ditches which discharge into the sea. The vegetation now is essentially a sward of hummocky *Deschampsia cespitosa* and other grasses with few herbs obvious even in summer.

The North Mere was extended southwards almost to the northern end of the West Mere by a moat (see Figures 25-27), the 'ditch between the site of the castle and the field of Embleton on the west side', whose construction is referred to in accounts of 1313-14 and had cost, up to that point, £13, 19 shillings, 7 pence (PRO DL29/1/3, roll 2). The accounts give the dimensions of the ditch as 16 perches (80.5m, assuming a standard perch of 5.03m) long, by 80 feet (24.4m) wide, and 18 feet (5.5m) deep, 'and in 4 rods (20.1m) of the same begun 40 feet (12.2m) in width and 4 feet (1.2m) in depth'. Evidently, this unfinished stretch was subsequently enlarged and deepened to the larger dimensions, for the documented width and total length tally precisely with the rectangular pond visible on the ground today, which is (as near as makes no difference) 100.6m long and 24.4m wide. In 1949, Douglas Simpson equated the rectangular pond with the documented 'ditch' and questioned how it could relate to the defence of the castle, but his line of enquiry was bluntly dismissed in the 'editor's note' that followed (Douglas Simpson 1949, 10-11; Hunter Blair 1949, 27). The depth of the ditch is now difficult to gauge due to the depth of water and silt, but, if measured from the top of the much more pronounced scarp on the eastern side, must be about 3m. In other words, the water within the moat must have been at least 2m deeper than in the adjoining North Mere. This may have been because the moat served as a distinct fishpond, perhaps separated from the main body of the mere by a barrier which has left no earthwork trace, such as wooden hurdling, or because the ditch fulfilled a more defensive function because the body of water was narrower at this point. An alternative, or additional, function of the ditch and a plausible explanation for its much greater depth may be that clay could have been extracted from here and used to make the dams of the meres more impermeable. During the environmental sampling by coring, a band of clay of varying thickness was encountered at different depths (see Appendix 1).

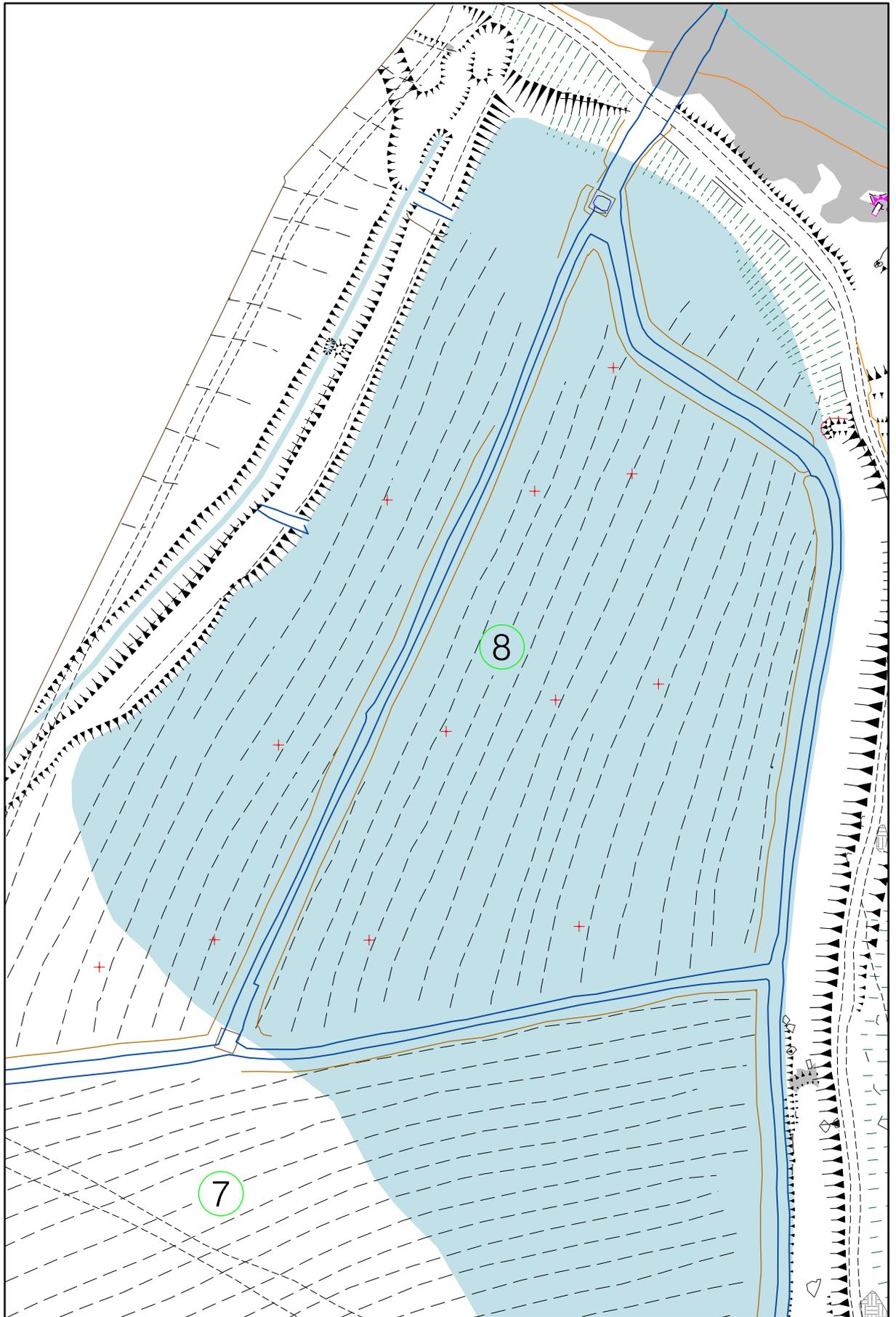


Figure 24. Plan of the North Mere (1:1000 scale)

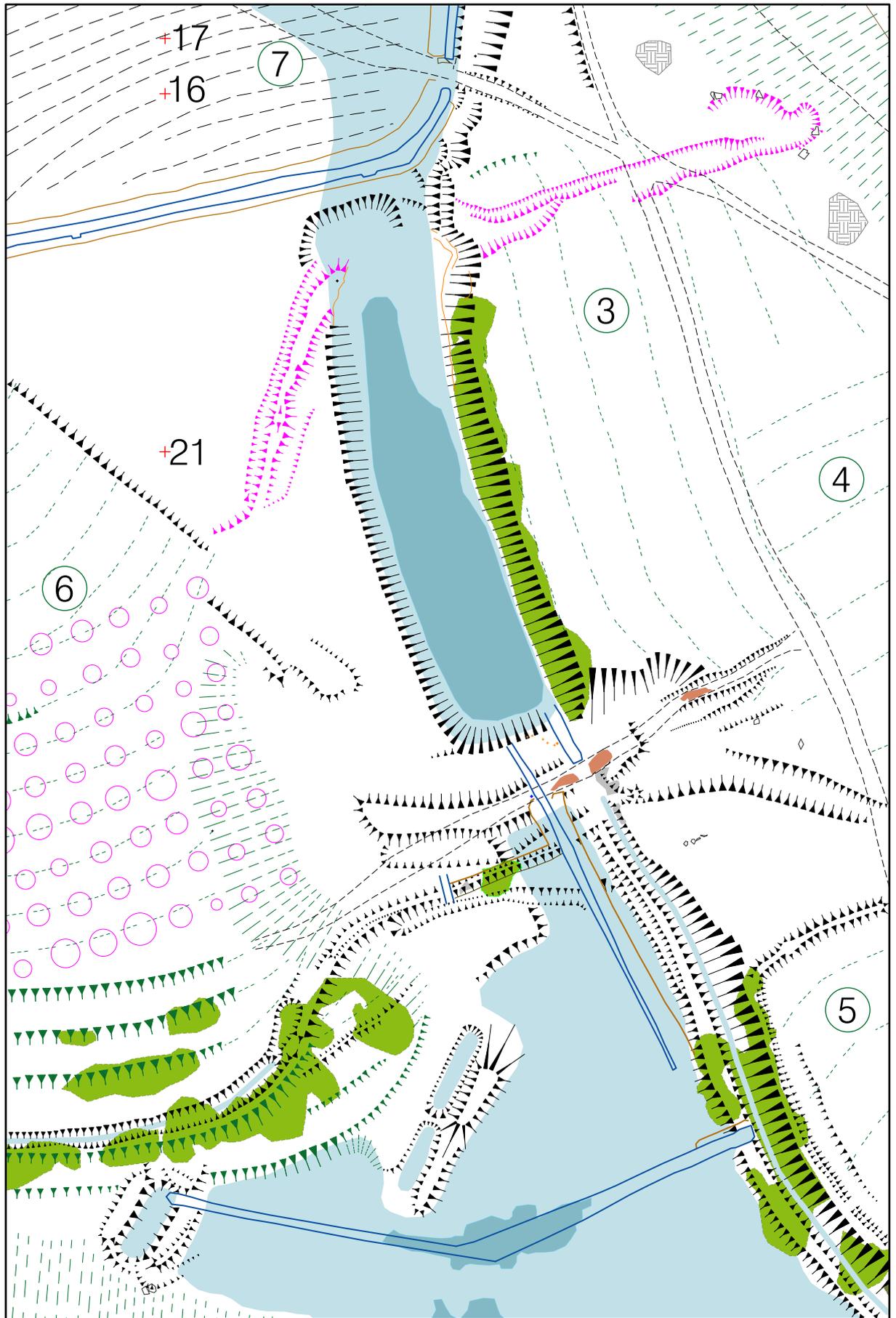


Figure 25. The moat, the West Mere and the approach to the western gateway (1:1 000 scale)

*Figure 26.
The North Mere
and moat,
flooded after
heavy rain and
snow melt, in
February 2004*



At its southern end, the moat terminates 7m short of the embankment described in Section 8.8, which carried the track from Embleton. The northern edge of the West Mere seems to have washed against the foot of the embankment, so that the earthwork effectively formed a dam preventing water flowing northwards from the West Mere.

The West Mere was the highest of the three, covering an area of almost exactly 1ha (2.6 acres), but nowhere more than 0.7m deep. It was formed by the construction of a small dam across a natural pinch-point where the main part of the Great Whin Sill is divided from the castle outcrop by a rock-edged defile only 20m wide (Figure 28). It is perhaps not coincidental

*Figure 27.
The moat,
seen from its
southern terminus*



that the site of the dam is also the point where a Right of Way still crosses the low-lying ground. Due to the digging of a broad drainage channel through this gap, presumably in the late 18th century or later, only fragments of the southern end of the dam survive. At its widest, it was 2.7m wide at the base and faced with stone on both sides; in places these stones are all that survive. The original height of the earthwork can be deduced as about 0.9m, from the height of an adjacent bank which served to separate the mere from a ditch running along the foot of the castle outcrop, whose function is discussed further below. The dam would have caused water to extend as far as the southern side of the artificial causeway that carried the track from Embleton to the western gateway described in Section 8.6. The effectiveness of a dam at this point is demonstrated by a simple sluice, formed by a single

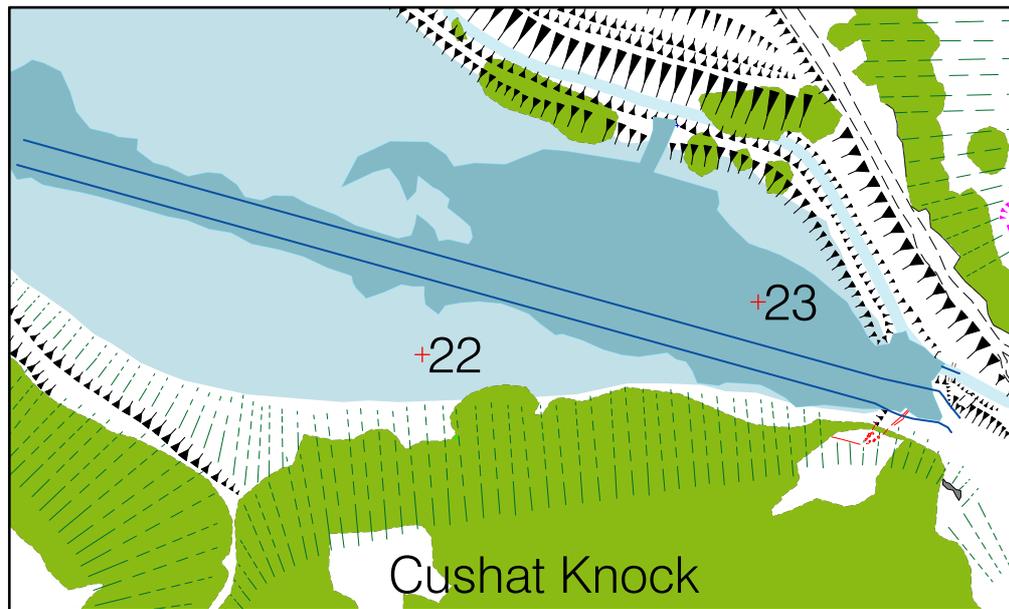


Figure 28.
Plan of the dam
and eastern end
of the West Mere
(1:1 000 scale)



Figure 29.
The West Mere
(pillbox in foreground);
water is retained
to provide a wildlife
habitat

steel sheet, inserted by the National Trust in recent years. Even following the exceptionally dry summer of 2003, this still served to hold back an extensive pool up to 0.2m deep, creating an important habitat for amphibians and other wildlife (Figure 29). The area is heavily poached by livestock and has a plant community typical of such places, including patches of dense *Agrostis stolonifera* and *Ranunculus* sub genus *Batrachium*, one of the white-flowered aquatic buttercups (species not determined).

To augment the considerable natural seepage of ground water into the West Mere, the small stream that naturally feeds into the area occupied by the North Mere appears to have been diverted by the creation of a dam, sited at the lowest point that the topography allows (Figure 30). The dam itself is poorly preserved, with only a stump of its southern end surviving, but a line of boulders upstream seems to have served to retain the southern edge of the pond. Immediately downstream, a broad linear cutting seems to be the quarry from which the material for constructing the dam was obtained. By raising the water level around 1.6m, the dam allowed water to be diverted along a narrow, leat-like channel which follows the side of a shallow valley that leads into the western side of the West Mere. The channel, which is defined principally by a prominent bank running along its southern side, gently descends along the edge of a tract of ridge and furrow cultivation (Field 6), rather than following the base of the shallow valley. This seems to have been done to cause the water to enter the mere at a point adjacent to the causeway, presumably so that it could be monitored or controlled. Although the relationship between the water channel and the ridge and furrow fields would suggest that they were in contemporary use, there are signs that the eastern ends of the strips closest to the channel were truncated and then re-aligned to a sharper curve to allow the channel to pass. In other words, the land was cultivated prior to the construction of the water channel and continued to be cultivated afterwards.

Water may also have been taken off at points along the channel to feed three probable fishponds, all now dry (see Figure 25). Each fishpond is rectangular and separated from the West Mere by a low bank, presumably formed with the upcast from the pond. The smallest pond may have had an overflow channel connecting it to the mere, allowing water to flow through it constantly. The size and depth (0.6m) of this example suggest that it may have been a 'stew pond', that is, a pond for rearing young fish before releasing them into a larger pond, such as the adjacent mere. The two larger ponds are aligned end to end and were apparently of roughly equal size, although the western end of the western pond is too indistinct to be certain. Neither pond was more than 0.6m deep.

The ditch running along the foot of the castle outcrop, mentioned above, is separated from the West Mere by a broad embankment built along the very limit of the higher ground, presumably using upcast material from the ditch. The ditch has clearly been recut as a drainage channel in recent centuries and the adjacent bank is breached by a series of drains that traverse the former mere. In its original form, the channel was around 0.6m deep, in defensive terms augmenting the outer face of the bank of the defensive perimeter, described in Section 8.6. However, its primary function seems to have been that of a by-pass channel, allowing water to flow from the shallower north end of West Mere to the upper end of South

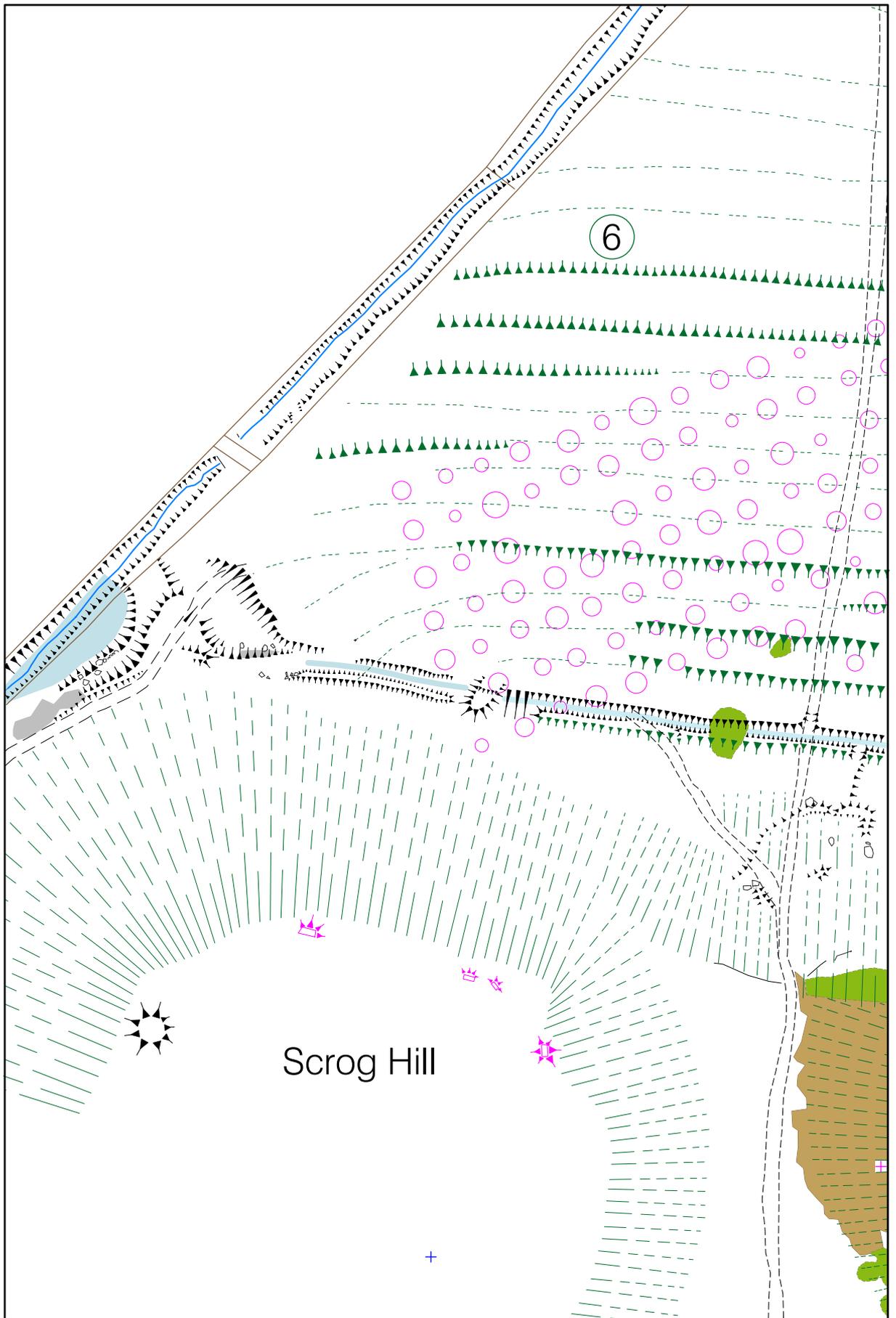


Figure 30. Plan of the pen pond and leat feeding the west mere (1:1 000 scale)

Mere. This transfer would presumably have occurred automatically, as water reached the required depth in the West Mere and overflowed into the by-pass channel. The precise point at which this occurred, presumably originally controlled by a sluice or similar arrangement, is uncertain, in part due to the later drainage operations. The eastern end of the by-pass channel, beyond where it has been cut away to facilitate drainage at the natural pinch-point described above, extends for some 50m south-east of the dam of the West Mere, indicating that there was probably a strip of dry ground in front of the dam of the West Mere which was not flooded by the South Mere. However, there is evidence that the western end of the South Mere may have been dug out by approximately 0.3m to bring the water closer to the dam. Even so, the breadth of the strip of dry ground would have been an appreciable weakness in the barrier created by the meres, suggesting that their purpose was not primarily defensive.

The South Mere (Figures 31 and 32) was once believed to be the castle's silted harbour (see Section 8.9). It covered an area of almost exactly 1ha (2.6acres), extending west of the storm beach that naturally forms both a dam and a causeway to the castle outcrop. The mere was nowhere more than 0.9m in depth, but like the West Mere, it remains prone to flooding in the winter months and this is reflected in the widespread growth of rushes (*juncus conglomeratus*). Water levels can now be regulated by a brick-built manhole, into which water can overflow into an underlying drain, which discharges into the sea. Local residents recall that the drain was deliberately blocked by children as a prank approximately 40 years ago, which led the area to flood rapidly. This encouraged ducks and other water fowl and was therefore a popular development amongst local hunters. The earthworks suggest that there may have been an earlier outflow at this point, subsequently disguised by post-medieval features, including the modern drainage works.



Figure 31.
The south mere,
flooded after
heavy rain

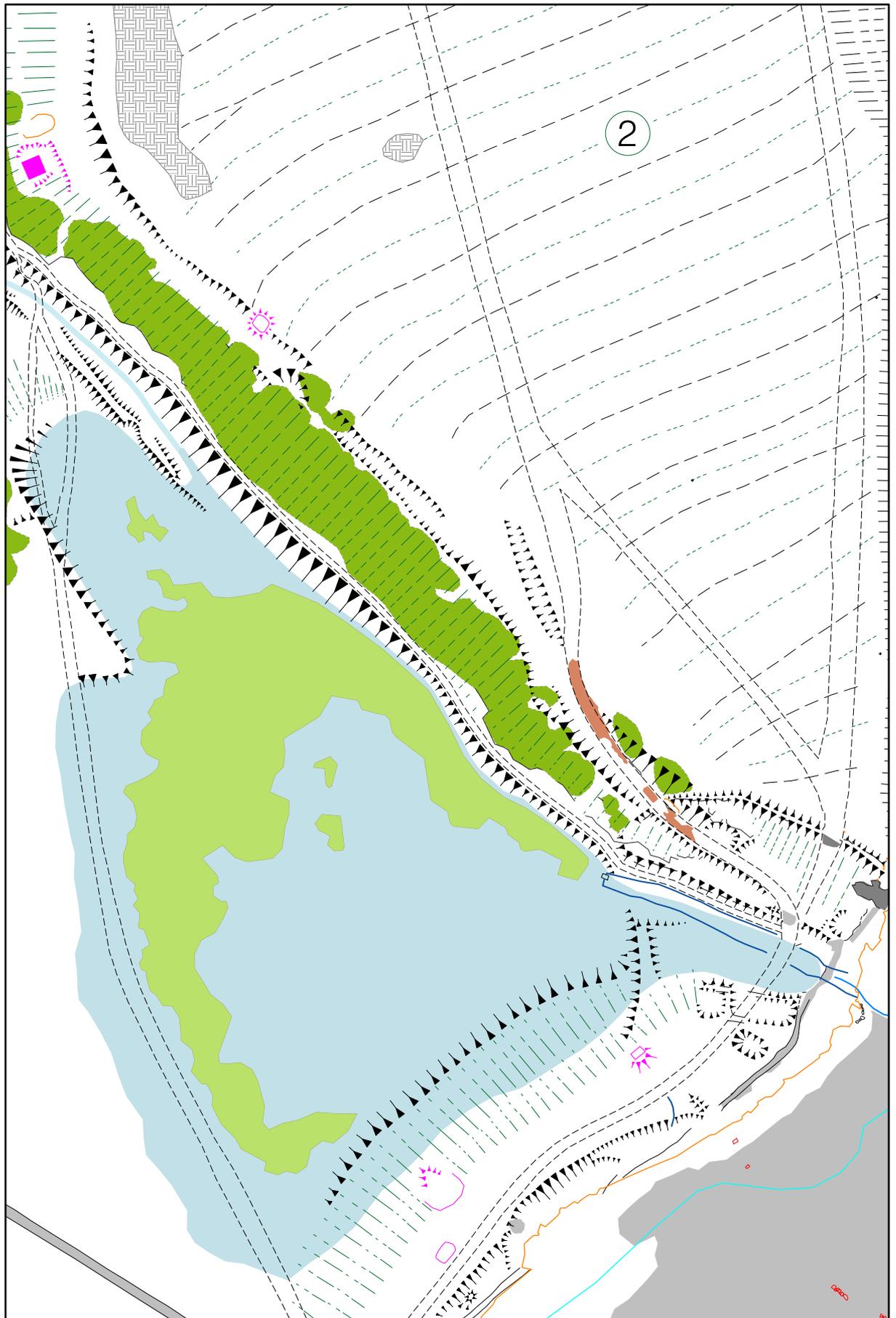


Figure 32. Plan of the South Mere (1:1 000 scale)

Coring was not attempted in the area of the south mere, since it forms part of the Scheduled Monument. From the nature of the vegetation it is, however, presumed to be an essentially mineral soil periodically inundated by outflow of water from the pond on the site of the West Mere.

8.8 The approach from Embleton

Previous studies have not identified, or seriously searched for, any physical manifestation of the implicit link between the castle and the village of Embleton, the chief settlement in the barony, contributing to the conclusion that the castle must have been approached from the south (Summerson 1993, 11). Douglas-Simpson, in proposing the existence of a borough on the slope south of the south curtain wall, depicted a 'causeway' approaching the castle outcrop from the west, but his sketch was inaccurate and did little to support his argument (Douglas Simpson 1949, 11 and fig 2). The 2003 investigation suggests that what is now a farm track from Dunstan Steads may have formed part of the main medieval approach (see Figure 25). Some 600m west of the castle, the track passes over the top of the rocky outcrop known as The Due, affording magnificent views of the architecture and its landscape setting. At the point where the line of the track enters the area surveyed in detail, it has been all but destroyed by post-medieval ploughing and drainage. For some 30m thereafter it survives as a broad and fairly well defined terraced track, with an additional slight embankment along the downslope edge. Beyond this, the exceptionally sharp turn of the ridge and furrow cultivation suggests that the route was at one stage respected but eventually ploughed over in the medieval period, leaving only the lower edge of the terrace distinguishable as an unusually pronounced positive lynchet. Further to the south-east, where the straight course of the route causes it to diverge from the cultivated high ground, the track is again preserved as a terrace and eventually as a low embankment. There is a gap, 20m wide, between the terminal of this embankment and the larger causeway which approaches the supposed western gateway through the outermost perimeter. Both embankment terminals appear to be intact, which suggests that the short intervening stretch of the approach may have been carried on a raised timber trackway. There is, however, no sign that the water in the moat would have extended beneath this elevated section, so the reason for the gap in the earthen embankment is unclear. This stretch must have coincided with a sharp, almost right-angled turn in the route, which is precisely straight up this point, but a drawbridge here, so far from the inferred site of the gatehouse, seems highly unlikely.

The embankment that carries the final section of the approach to the supposed western gateway is a substantial earthwork 0.4m high, which effectively dams the northern end of the West Mere, as described in Section 8.7. Close to the likely site of the gateway itself, a cobbled surface, well-constructed using basalt pebbles brought from the beach, could conceivably represent the original medieval surface. However, in view of the continued use of this route to the present day, a later origin, or at least later mending, could be suspected. Within the supposed gateway, earth-moving appears to have been undertaken to create a ramp up the slope. Hollowed and terraced trackways suggest that the route continued straight up the hill, towards a point well in front of Thomas of Lancaster's gatehouse, implying another abrupt turn at that point. However, a tract of broad ridge and furrow (Field 4), which

is demonstrably later than Field 3, seems to have obscured any earthwork traces of the route. It is worth noting that even where relatively clear, the earthworks of the trackways are slight, suggesting that the use of the route was neither intensive nor prolonged.

8.9 The 'harbour' and possible fish-trap

From at least the early 18th century, it was believed that the sea had once entered the inlets to the north and south of the headland so that the castle had been 'by means of a deep ditch surrounded by the sea' (Russell and Price 1769, 194). Apparently drawing upon this, and mistakenly believing that Henry VIII's 'fleet' had taken shelter in Dunstanburgh's harbour during a storm in January 1514, the authors of the first guidebook proposed that the southern inlet might be the site of a 'port', which they described as 'small and difficult of access' (Hunter Blair and Honeyman 1936, 7). This theory was perpetuated in later publications (Hunter Blair and Honeyman; 1947, 2; Douglas Simpson 1949, 9-13; Hardie and Rushton 2000, 72). Douglas Simpson (1949, 12-13) went so far as to suggest that Lancaster anticipated the imminent surrender of Berwick-upon-Tweed to the Scots and envisaged Dunstanburgh as a replacement town and major harbour. In the 'editor's note' that followed this article, Hunter Blair (1949, 27) was quick to pour cold water on this theory, pointing out that in 1417, only three cobbles belonging to the King were kept at Dunstanburgh 'for sea fishing', which did not suggest to him a large and busy port. This point, along with a 1443 reference to the delivery of a cargo of lead sheeting from Newcastle, demonstrate the continued presence of sea-going vessels at Dunstanburgh into the 15th century, though it is worth noting that the last document, the Receiver's account for 1442-3 (PRO DL29/361/5976), refers to a 'boat landing place' (*loco applicacionis batelle*), rather than an actual harbour. However, all these references are arguably irrelevant to the understanding of Lancaster's intentions a century earlier. Documents contemporary with the castle's brief apogee refer only to the purchase of new oars for 'the Earl's boat' in 1319 and a new boat in 1368, neither of which can strictly be treated as evidence for a harbour.

Aside from the academic debate, many local people have also continued to accept the association of the South Mere with the harbour, based partly on the existence of three iron 'mooring rings' fixed into fissures in the outcropping basalt on the north side of the inlet. Of these, only one can now be located, on the evidence of an iron pin driven into the rock and sealed with lead, the actual ring having been removed within recent years. This is thought to have been the most easterly of the three rings (information from Katrina Porteous, local resident).

In most modern publications, however, the location of the harbour has been treated cautiously and it has been pointed out that the so-called 'fleet' of 1514 comprised only four ships, of which two happened by sheer chance to be near the castle when they were sighted (Summerson 1993, 25-6; Linsley 2005, 93).

The 2003 investigation proved conclusively that the inlet was never the site of a harbour. The high-resolution ground modeling undertaken using GPS satellite mapping equipment confirms the immediate impression to the naked eye: that the sea could only have entered the South

Mere under extreme conditions. Although no environmental sampling was undertaken in this area, it is topographically comparable to the North Mere, where coring has demonstrated conclusively that the sea has never entered. In the light of this, it could have been anticipated that any evidence for a harbour would be found on the foreshore itself.

The main component of the dock discovered in 2003 is the remains of a stone-built quay at least 72m long, which broadens from 3.6m wide at its landward end to c.12m at its seaward terminal. Due to the threat posed by continuous erosion by the sea, the structure and its environs were recorded in greater detail (Figure 33). The quay runs parallel to a natural spine of rock called Cushat Stiel, which extends south-eastwards from the shore and may have been artificially shaped in places. Cushat Stiel, although washed over at high tide, largely breaks the force of waves on its south-west side, especially when the wind is in the north-east. Research by Katrina Porteous indicates local fishermen sometimes refer to the adjacent inlet as 'the Square Haven', suggesting that, at least at one time, it provided shelter for boats. 'Square' does not necessarily describe the shape of the inlet: the term is applied elsewhere to fishing settlements, sometimes rows of cottages not arranged in a square, so the name could refer to the post-medieval settlement on the foreshore. 'Cushat' meaning a 'dove' or 'wood pigeon' in Northumbrian, is also applied to the adjacent beach, known locally as Cushat, and to a hillock, Cushat Knock, that overlooks the beach. The 'stiel' element of the name is applied widely to rocky points, but is perhaps more significant in this context. The word has a range of meanings, with instances where it denotes an open drain or ditch; a running stream; a deep pool; or a form of fishing net usually deployed in a circular pattern (Wright (ed) 1961, 750). It could therefore conceivably be connected with the outflow from the South Mere; the deep water channel leading to the dock; or the possible fish-trap (see below).

The quay is identifiable for the most part as two parallel lines of large basalt boulders used as facing stones (Figure 34); at the seaward end of the quay, the largest of these are up to 1.8m long and have been artificially shaped. At this point, three courses of masonry are visible in places. The stone which formed the core of the structure has been spread by wave action and now forms a low ridge several metres broader than the quay. Towards the landward end of the quay, where the alignments of facing stones survive more intermittently, a small patch of the original cobbled surface of the quay survives intact. These cobbles are much smaller basalt pebbles, laid in a rough 'herring-bone' pattern (Figure 35). If this surface remained level to the seaward end of the quay, it can be estimated that the structure would have stood around 1.5m high at that point.

Amongst the spread of basalt boulders that once formed the core of the quay, an unusually high concentration of small, eroded pieces of sandstone was recorded. From visual inspection, this seems to be similar to the stone used to face the castle walls.

A small sandy beach is confined between Cushat Stiel and the quay, possibly once partly cobbled, although only the facing stones that may have defined this area now survive. The beach, as well as the sea passage leading to it, must have been a considerably better

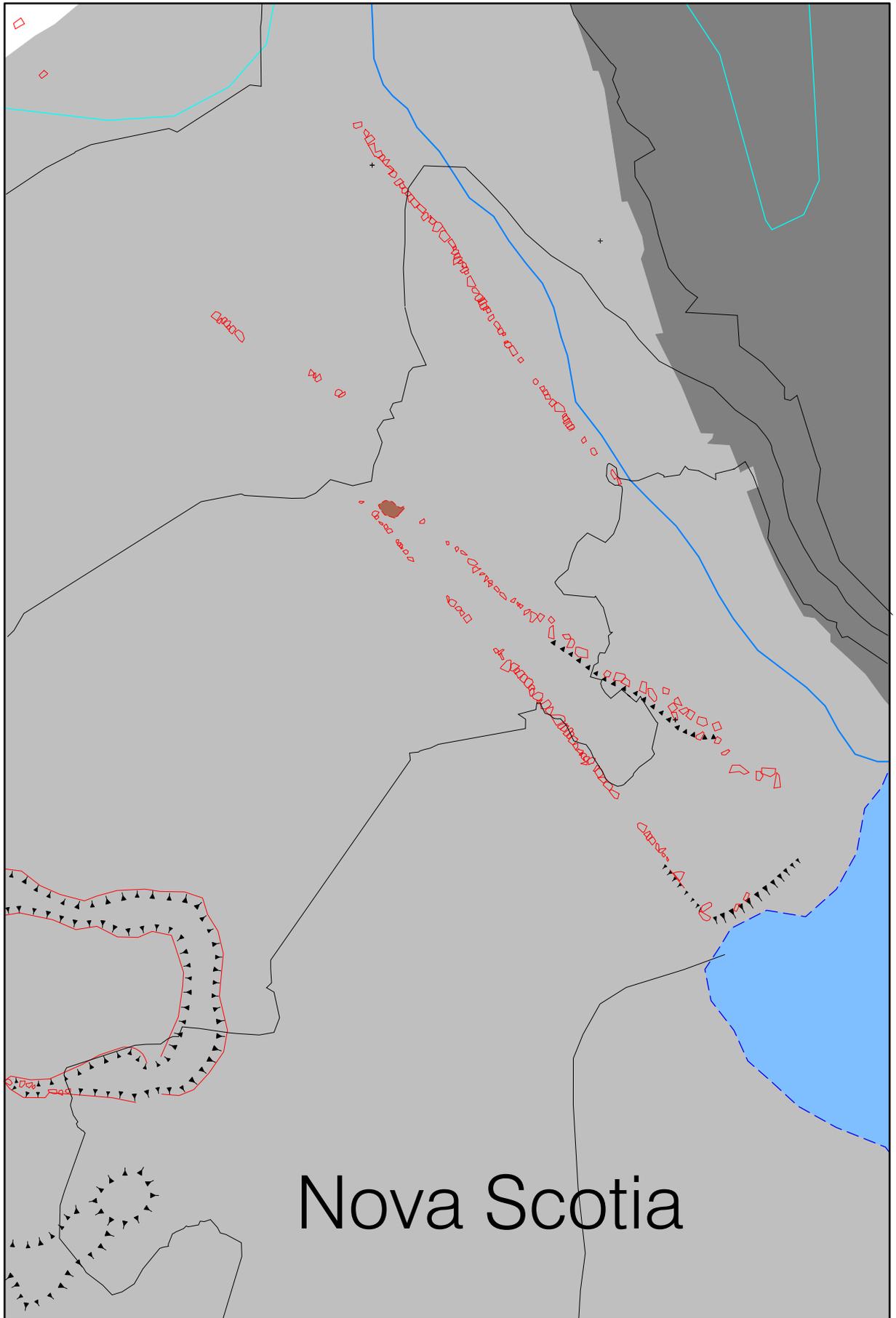


Figure 33. Plan of the quay, with contours at 1m intervals showing the micro-topography of the beach (1:500 scale)



*Figure 34.
Alignments of facing
stones along the
stream (left) and
forming the south-west
side of the quay (right)*



*Figure 35.
Patch of intact
cobbling on the quay*

landing place prior to the redistribution by sea action of the boulders that once formed the core of the quay. It would have provided an adequate place to beach small fishing boats and somewhat larger ships. The occupants of the post-medieval settlement overlooking the beach, described in Section 9.2, almost certainly re-used the same beach for drawing up small fishing boats. As ever, this continued use may have involved modifications to the medieval structure, but it seems highly unlikely that they would have been responsible for actually constructing structures of this size from scratch.

It should be noted that while the 'harbour' provides a good haven when the wind is in the west and an adequate one when the wind is in the north-west, it is practically useless when the wind is in the south-east. Access by sea, or the perception that this was possible, may have been an important factor in the design of Dunstanburgh, but this is not to say that the dock was in regular use. It may be that its main purpose was to allow the importation of the sandstone blocks, as discussed in Section 8.11.

An approximately rectangular structure 30m in diameter, crudely built using large rocks, can be distinguished amongst the boulders towards the low tide mark on Nova Scotia beach. This may represent a trap for fish or crabs, though, to be effective, the low boulder walls must have been supplemented by a net or wicker barrier. Though impossible to date with any confidence, the size of the boulders used seems at odds with the scale of post-medieval settlement in the vicinity, hinting that the structure may be of medieval origin.

8.10 Medieval and later agricultural remains

Ridge and furrow – the earthworks left by prolonged arable agriculture – survives across much of the survey area and there is sufficient evidence to show that it both predated and outlived the use of the castle. As mentioned in Section 7.1, the earliest cultivation on the headland itself appears to predate the construction of the south curtain wall, spanning the areas here termed Fields 1 and 2. However, the ridges that form the southern half of Field 2 appear to have been subdivided into two narrower strips, suggesting that ploughing may have continued into the post-medieval period. The same conversion may have occurred within the curtain wall (Field 1), since Edmund Gibson, writing in 1695, refers to arable agriculture having taken place there 'lately' (Gibson 1695, 873). The grain yield that he records (240 Winchester bushels, or about 8.46 cubic metres) implies that the large majority of the outer ward was under the plough, although he also refers to the land producing 'several Cart-loads of Hay'. By this date, horses, rather than oxen, may have been used to pull the plough, so the 'reverse-S' pattern evident in the lines of the ridges could reflect an earlier ploughing regime. As mentioned in Sections 8.7 and 8.8 respectively, ploughing in Field 6 seems to have taken place both before and after the construction of both the water channel that supplied the West Mere, as well as the terraced trackway that carried the approach from Embleton. Indeed, it appears to be Field 6 where harvesting of a cereal crop is shown under way in the foreground of the engraving made by Francis Place in 1678 (Figure 5). The fact that these ridges are relatively broad and retain a reverse-S pattern seems to go against the widely held view that broad width reflects a medieval date and

could imply that the narrow ridges evident in the southern half of Field 2 are of even more recent origin, possibly dating to the 18th or 19th centuries.

Field 4 impinges on the eastern side of Field 3. Since the southern extent of Field 3 seems to have respected the approach to the great gatehouse, it seems likely that this area may have been cultivated during the active use of the castle. Field 4, on the other hand, seems to have originated after the demise of the route, which would account for the absence of clear traces of the trackway.

Only the narrow, almost perfectly straight ridges that make up Fields 7 and 8, covering the former area of the West Mere, are unlikely to have any medieval antecedents (note that these have been omitted from Figure 10 for clarity). The ploughing is probably contemporary with the initial efforts to drain the area and may well have been intended solely to improve the quality of the pasture.

8.11 Stone quarrying

The castle employs three types of locally available stone: sandstone (freestone) for the facing stones and more intricate architectural elements; basalt for the core of walls and the raising of the east curtain wall probably undertaken in the late 1450s in anticipation of the castle's involvement in the Wars of the Roses; limestone for the majority of the east curtain wall.

A number of stone quarries are present in the west-facing cliff of the Whin Sill Escarpment between Craster and the castle, and there are suggestions that the natural inlets in the shoreline immediately north of the castle may also have been enlarged to some degree by quarrying. However, in all these cases, the exposed bands of sandstone are thin and not of the highest quality, suggesting that the surrounding basalt was the object of the quarrying. Nor are these quarries necessarily associated with the construction of the castle: most of those on the west side of the Whin Sill may well be of later origin, given the extent of the post-medieval workings around Craster.

Basalt is of course available on the castle outcrop itself and on the adjacent shoreline, in the form of outcrops and boulders and these easily accessible sources may well have supplied all the basalt rubble required, as well as cobbles for paving. The quarrying at the east end of the dry moat adjoining the south curtain wall, which appears to have been abandoned at an early stage, is certainly contemporary with the construction of the castle, for it predates the construction of the drawbridge abutment for the Egyncleugh Tower. As described in Section 8.4.3, an area of surface quarrying on the foreshore outside the postern at the southern end of the east curtain wall probably relates to the raising of that wall in the late 1450s. Here, the exposed upper layers of basalt have been stripped off over an irregular area and to a varying depth. This suggests a rapid and unsystematic operation, perhaps consistent with the context in which the curtain wall was hurriedly raised. A quarried section of the coastal cliff north of Field 2 is also very likely to be contemporary with the castle, in the absence of later field walls or other structures nearby.



Figure 36.
Quarries at Howick,
possibly the source of
the 'freestone' used
to build the castle

Visual inspection of the 'freestone' suggests that it is closest in colour and texture to the thick and easily accessible sandstone outcrops exposed on the coast in the vicinity of Howick Seashouses (NU 263 172). Here, extensive quarries of considerable age (Figure 36) retain faint traces of tool marks, but none that are distinctively post-medieval. Two large quarried blocks, comparable to those used in the castle walls, lie on the beach near one of the quarry faces. Since the quarries are only 4.8kms (3 miles) south of Dunstanburgh by sea, and numerous small fragments of sandstone are present around the quay on The Cusha beach, it is possible the stone was loaded onto boats beached at the quarries and floated off at high tide. Documents of 1313 refer to the use of wagons to transport stone, but these could conceivably have been used only for the final stretch of the journey. If so, the importation of building stone may have been a major part of the function of the castle's 'harbour'.

There are numerous sources of limestone within the Barony of Embleton, and it has not been possible to establish the specific quarry from which the stone for the east curtain wall was obtained. Indeed, more than one quarry may have been used, since there are several places in the wall where concentrations of visibly different coloured and/or textured stones are apparent.

8.12 The decay of the castle

On the evidence of a documentary reference of 1528 to the potential re-use of timber and lead from Dunstanburgh to repair the Moot Hall at Embleton, it has been concluded that the castle was already being systematically stripped of its materials by the early 16th century (Bates 1891, 185-6; 1895, 209). Certainly, according to Robert Bowes' *Book of the State of the Marches*, compiled in 1550, the castle was at that time 'in wonderfull great decaye', while Elizabeth I's commissioners in 1584 described it as 'decaied for want of repairinge by

long continuance.' In 1591, another survey found that 53 yards (48.5m) of the north-western wall of the castle was 'utterly ruined in front'. The fact that the wealthy Alice Craster inhabited some part of the castle between 1594 and 1597, and may have used some buildings to keep her livestock, must indicate that a degree of refurbishment took place, but it has not been possible to securely identify much physical evidence for that, apart from the narrowing of John of Gaunt's eastern gateway into the inner ward. The drawing made by Francis Place in 1678 shows the western stretch of the curtain wall, between Thomas of Lancaster's gatehouse and the Lilburn Tower, including John of Gaunt's gatehouse, as being virtually intact, with some of the crenellations surviving (Figure 5). The engraving made by Samuel and Nathaniel Buck in 1720, which also shows the west curtain wall virtually intact, may also be reliable in this respect. A pencil sketch made in the late 18th or earlier 19th century and retained by the Newcastle Society of Antiquaries also shows much of the west curtain wall standing well above ground level, although clearly falling into ruin. Today, apart from an amorphous lump of masonry where a mural tower used to stand, most of this stretch does not stand above ground level.

It is clear that stone robbing is partly to blame for this, both from the thorough eradication of the wall to ground level and the fact that loose stones, almost all basalt blocks, have been gathered into a series of piles along the track that skirts the foot of the castle outcrop below. In this context, the excellent preservation of the Lilburn Tower and the whole southern curtain wall must be considered. Summerson (1993, 20) puts it down to differences in the quality of the original stone or workmanship, but this seems an inadequate explanation in itself, especially since it is usual for the best quality stone to be removed first. It is possible that the Grey family, whose principle seat was at Howick Hall and who owned Dunstanburgh between 1605 and 1869, intervened to prevent the removal of those elements of the castle which offered the most attractive landmarks when viewed from their estate. The ruins are particularly striking from the Grey family bathing house (seen in the background in Figure 36), situated on the cliff-edge north of Howick Seahouses (NU 262 175). Indeed, the promontory where the bathing house stands offers the only clear view of the castle on this stretch of the coast, so the view may have been the key to the choice of location.

Other local landowners appear to have 'borrowed' the prospect towards the striking ruins, in keeping with ornamental or designed landscapes of the day. Thus, the mock gatehouse built by the Craster family, probably towards the end of the 18th century or in the early 19th century (information from Sir Oswin Craster), seems to have been sited to take advantage of the distant view of the ruins that is revealed as soon as the visitor passes through the arch (NU 251 196).

9. POST-MEDIEVAL SETTLEMENT

9.1 The shieling

Post-medieval settlement on the headland comprises two separate nuclei. On the gentle western slope of the castle outcrop, the most fertile and sheltered part of the headland, the well preserved earthwork remains of a 'longhouse', or shieling, lie alongside a roughly square enclosure of 0.39ha (0.96 acres), with a smaller building set into the corner nearest the shieling (Figures 37 and 38). The main range of the shieling, which is built directly on top of an earlier cultivation ridge, comprises four rooms, but appears to have been extended on the same axis by the addition of two smaller rooms at the east end and possibly another at the west. A lean-to structure adjoins the north wall, where a small embanked enclosure perhaps represents a garden. The building could conceivably be late medieval in origin, for long houses of essentially similar form have been shown by excavation to date as early as the

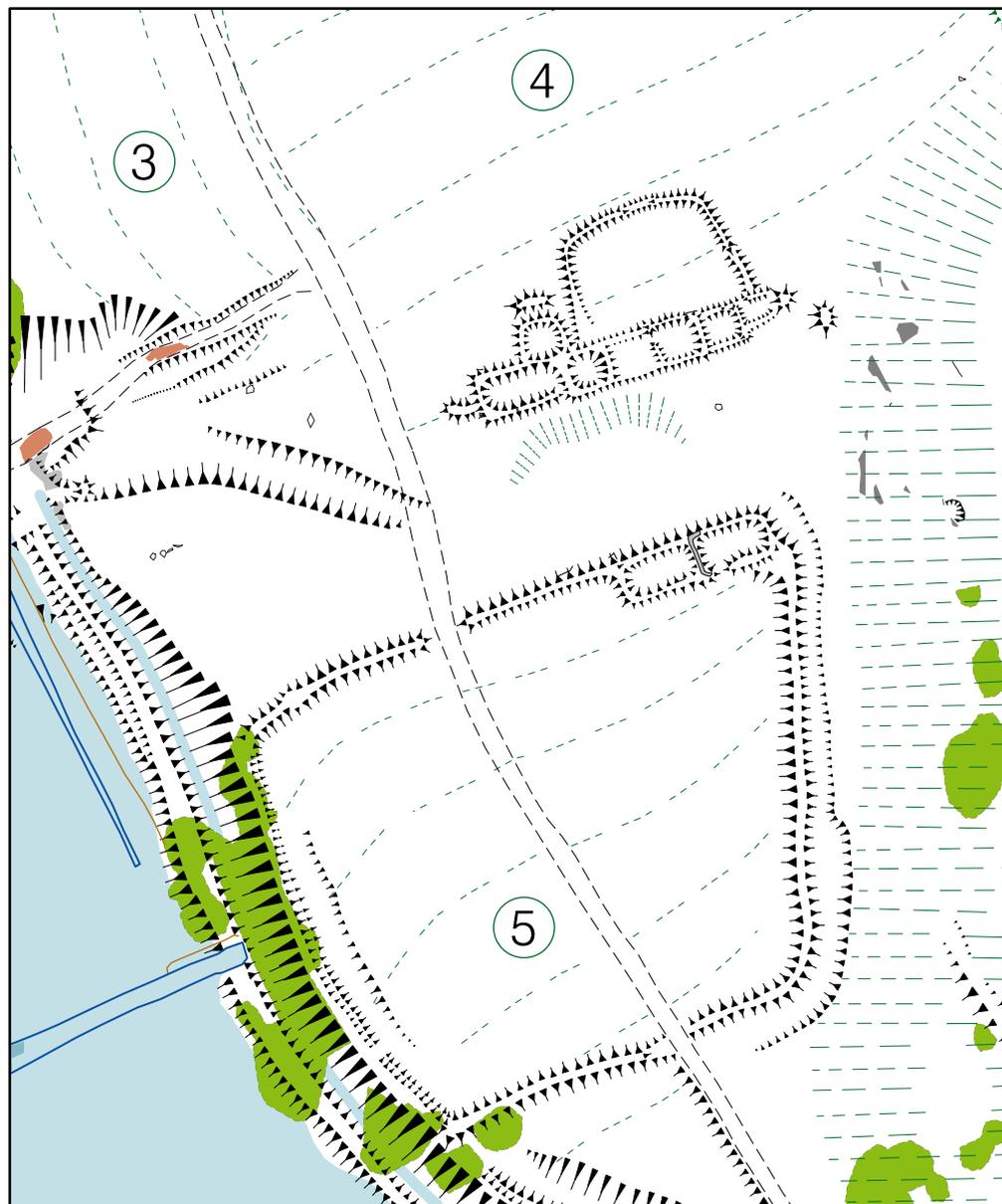


Figure 37.
The post-medieval
farmstead,
overlying medieval
ridge and furrow



*Figure 38.
The post-medieval
farmstead,
seen from the west,
with the West Mere
in the foreground*

14th century. The adjacent enclosure is defined by a substantial bank, presumably originally carrying a hedge, which also directly overlies the broad cultivation ridges. The ridges within the large enclosure are no more developed than those outside it, suggesting that the land within was not subjected to further ploughing, presumably because it was used as a livestock corral. In the 1950s, Walter de la Aitchison, taking his cue from documentary references, interpreted the earthworks as a possible 'burgh', port facility, or siegework (NMR a). However, none of these suggestions is at all convincing: the complex is absolutely typical of a late medieval or later smallholding.

9.2 Nova Scotia

A settlement at Cushat beach, apparently comprising at least two buildings, is marked on Armstrong's 1769 map of the county and named as Nova Scotia. Hunter Blair (1949, 27) speculated that the settlement might pre-date the establishment of the castle and represent the '*burgh*' element contained in the name Dunstanburgh, but there is no physical evidence to support that theory. It has been suggested that the name, today applied to the beach, may indicate that the settlement founded by Scottish immigrants (Craster 1989). Alternatively, it may originally have been transferred to the settlement from a boat wrecked or stranded here, perhaps one of the three unnamed vessels lost here in 1752, one of which may be that depicted in the foreground in one of Turner's 1797 views. The same painting also shows a whitewashed cottage overlooking the beach. The settlement appears to have been abandoned by 1828, when Greenwood surveyed his map of the county.

The foundations of the cottage depicted by Turner are still identifiable. Where the modern footpath crosses the building, erosion has denuded the earthworks and exposed the stonework, but most of the walls survive only as low banks. The cottage is aligned parallel to the supposed outflow from the South Mere, hinting that this may have been a more

pronounced depression when the building was first constructed. The fact that the cottage almost entirely blocks the obvious southern approach to the headland must indicate that it was built after the castle had fallen into disuse.

The carriage route from Craster to Embleton, mapped by Armstrong in 1769 but not by Fryer in 1820, and shown as only a minor track by Greenwood in 1828, evidently passed just to the west of the cottage and crossed the outflow from the South Mere via an earthen embankment and presumably a timber bridge, of which no trace survives. It is tempting to infer that Nova Scotia may have been a stopping-off point on the carriage route. Three iron rings fastened to the cliff face nearby, regarded by local people as mooring rings (see Section 8.9), seem more likely to have been used for tethering horses.

Two or three tiny circular enclosures, roughly built with smaller boulders, were identified just below the high water mark at the northern end of the beach, at the point where a trickle of fresh water runs out of the marshy ground that was once the site of the South Mere. One local resident believed that in the first half of the 20th century, hessian sacks full of mussels were stored in these to preserve and clean the shellfish. The origin of this practice, if not the structures themselves, may be contemporary with the occupation of the adjacent cottage. Shells and other probable midden material, including rough cloth or sacking, can be seen exposed along this section of the shoreline, sealed beneath a thin deposit of sand.

10. 20th-CENTURY REMAINS

10.1 The context of the Second World War anti-invasion defences

Following the German conquest of Norway in April 1940, it was recognised that Britain's east coast, with its numerous long, gently shelving beaches and sparsely inhabited hinterland, was highly vulnerable to an invasion launched from Scandinavia (Dobinson 1996, 109). The coastline between Craster and Greymare Rock, with a rough, rocky foreshore and a secondary natural barrier created by the Great Whin Sill a few hundred metres inland, would clearly have been relatively impregnable. By contrast, to the north, Embleton Bay and Beadnell Bay, with their long beaches and relatively unimpeded hinterlands, were considered – at least by the British High Command – to be extremely vulnerable. Against this background, the anti-invasion defences in the environs of the castle can be divided into two categories: the 'standard' installations connected with the defence of any normal stretch of coastline; and installations specifically designed to deal with a possible invasion on the beaches to the north. Craster radar (or, more properly RDF, standing for 'radio detection and direction finding') station, which was examined as an extension of the investigation of the castle, falls into the second category, although it lies more than 2kms south of the vulnerable beaches, since a major part of its function was to give advanced warning of a seaborne assault (Hunt and Ainsworth 2006).

10.2 Standard anti-invasion defences

What would have been the most obvious of the 'standard' anti-invasion defences – the barbed wire entanglements – have left almost no trace *in situ*. Local residents recall that entanglements comprised three separate lines of coiled wire: the lowest line on the beach itself; the middle one close to the high tide mark and the upper one an equal distance onto dry land. In a few places, erosion has exposed the bases of steel stanchions which were probably main supports for the entanglements of the upper line. The intervening supports would have been steel 'screw pickets', none of which survive *in situ*. This apparently confirms the recollections of local residents that the Italian prisoners of war tasked to remove the entanglements simply sawed through any supports that proved troublesome to remove. However, it is clear that on the whole the prisoners did their job properly: there are large dumps of screw pickets and barbed wire in the coastal inlet north of the castle. Wire was also dumped in large quantities behind the ablutions block at the Craster radar station, which had been converted into a camp for the Italian prisoners in mid-1944 (Hunt and Ainsworth 2006).

Immediately behind the foreshore is a string of two-man rectangular slit trenches and square pits for heavier weapons. Few are well preserved: most are detectable as depressions less than 0.2m deep, with slight frontal embankments. Other weapons pits were sited on vantage points just inland to provide covering fire. Weapons pits are conspicuous by their absence along the eastern side of the castle; indeed, the only certain example lies immediately north of the Lilburn Tower, commanding a broad field of fire northwards. This probably indicates that the ruined walls of the castle itself were thought to provide sufficient cover for defenders.

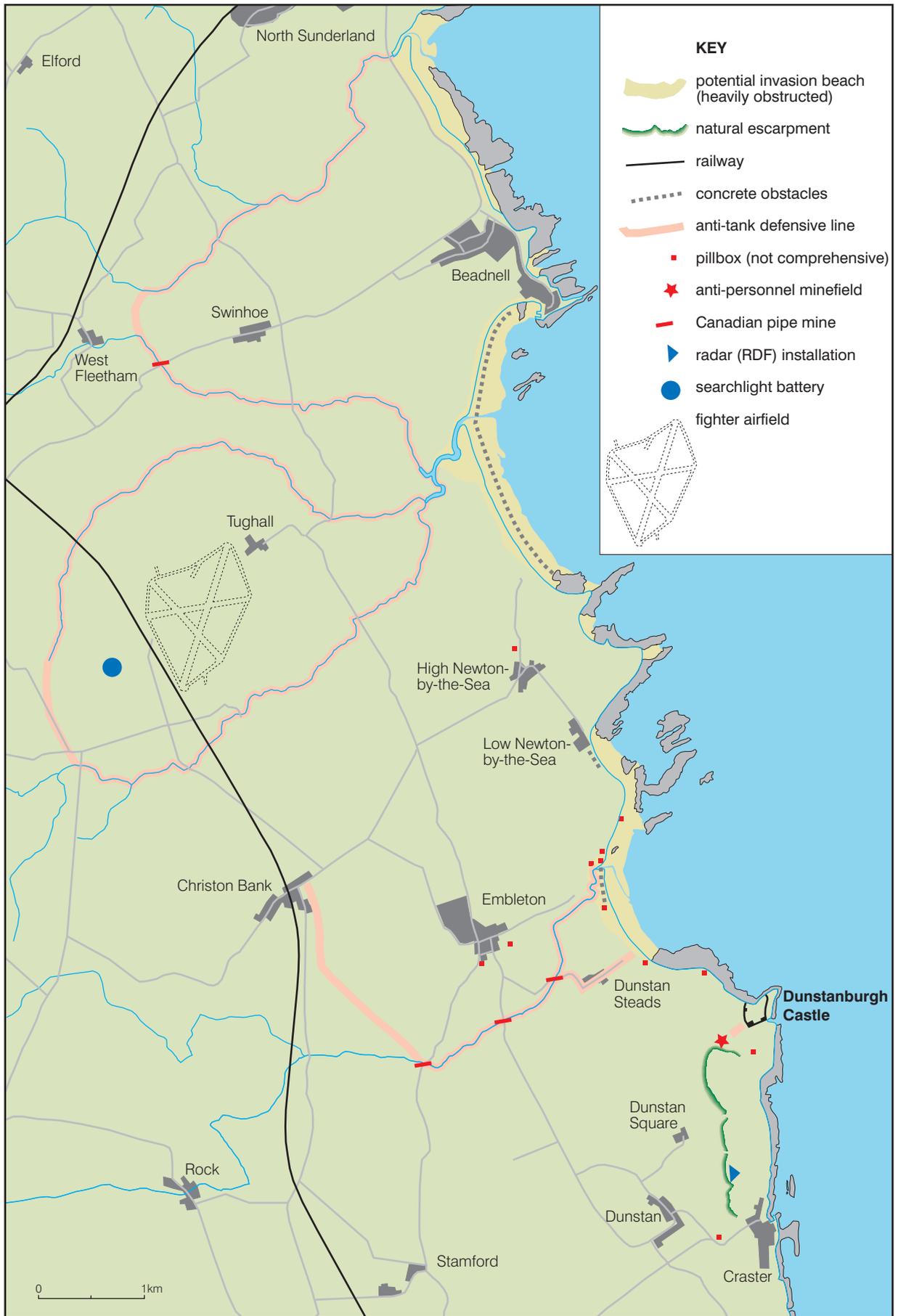


Figure 39. Dunstanburgh in relation to potential invasion beaches and local anti-invasion defences

At no point is there any sign that the walls were modified to create better firing positions, though this was common practice.

10.3 Invasion beach defences

To the north of the castle, a large lozenge-plan pillbox flanked by eight weapons pits, all connected by a network of trenches, occupies a headland with good fields of fire to the north-east. Apart from limited infilling of the trenches closest to the golf course, the complex is extremely well preserved, many of the weapons pits surviving to more than 1m deep, despite being dug into sand dunes. This example, typical of other emplacements further north which were examined more rapidly, serves to illustrate the different character of the installations directly associated with the beaches.

The key intention of the anti-invasion strategy was to contain the enemy landing force in a restricted area where it would be most vulnerable to air and artillery attack. To this end, an anti-tank defensive line was constructed, whose design is known from a War Office plan dating to the first quarter of 1940, held in the Public Record Office (reference: WO199/1508; see Figure 39). One element of the defensive line surrounds the airfield at Tughall, which could have been used to launch continuous air raids on an invasion force trapped on the nearby beaches. The defensive system was investigated rapidly, and not comprehensively, in 2005: the anti-tank line follows natural watercourses wherever convenient and sometimes roads, but in the intervening stretches, no surviving earthwork remains were observed. Roads leading westward and southward out of the contained coastal strip were blocked by 'Canadian pipe mines'.

In the event of the invasion force breaking southwards out of the contained area, the Great Whin Sill formed a partial additional barrier to the south of the main anti-tank line. However, the escarpment left two natural routes which could have allowed a break-out and therefore had to be artificially defended: the coastal track skirting the castle outcrop, leading south to Craster; and the narrow defile leading onto Scrog Hill. From there, it would have been possible to descend again onto the inland plain via the series of gaps in the landward facing cliff between there and Craster.

To counter the first threat, a 6m-wide anti-tank ditch was dug between the foot of the castle outcrop and the northern end of the medieval moat (see Figure 30). The anti-tank ditch is a maximum of 0.3m deep today, presumably because it was deliberately filled in after the War, but it is visible in its original deeper form on aerial photographs taken in June 1946 (RAF 1946). To the west of the medieval 'great ditch', a low bank, presumably originally surmounted by a superstructure of which no trace can now be identified on the surface, continued the defensive line as far as the edge of a minefield. The apparent weak point in the line – the terminus of the medieval moat – would have proved impassable to either infantry or vehicles, due to the great depth of mud.

A minefield, covering a rectangular area 166m by 46m, was placed across the approach to the defile leading up onto Scrog Hill. It comprised 176 mines laid out in a grid pattern of eight

rows of twenty-two mines, at intervals of 8.0m. Local residents recall that foxes occasionally set off the mines, on one occasion triggering widespread panic that a German invasion had begun. This indicates that the mines were anti-personnel, rather than anti-tank, devices. The positions of the mines, which would have been practically invisible when operative, can be clearly seen today because the charges were dug out using a mechanical digger at the end of the war. This operation left large, shallow, straight-sided pits, schematised on Figure 40. The two or three instances where pits are either absent or very indistinct may equate to those set off accidentally before the end of the War, which may have been evident in 1946 when the charges were removed.

Several other installations were sited to interact with the minefield so that it would have functioned as more than a merely passive defence. A series of weapons pits and slit trenches along the crest of Scrog Hill would have allowed defenders to fire from positions of relative safety, especially using mortars, on any force attempting to cross the minefield. One of the better preserved of the weapons pits, sited close to the pillbox, is the only other element of the defences recorded prior to 2003. Similar earthworks may well be concealed by the dense gorse; most of those recorded in November 2003 were exposed by a wild fire in the preceding summer.

The pillbox south of the castle gate, together with a number of flanking weapons pits and slit trenches, was sited to provide fields of fire in two directions: south-eastwards towards Cushat Stiel beach and north-westwards towards the minefield, thus creating overlapping fields of fire in both areas. The pillbox is of a square plan, with a pre-fabricated design (Figures 40 and 41). According to a visitor to the castle, it was built in 1940 by 1st Battalion Essex Regiment, who were then based at Ellingham Hall. The inner and outer faces of the



*Figure 40.
The pillbox,
seen from the
north-east*



*Figure 41.
The west side of the
pillbox, highlighting
bullet impacts
resulting from a
training attack*

walls were formed by slotting concrete panels between T-profile wall and corner posts. The panels were held in tension by steel bolt corner stiffeners, forming permanent shuttering with an internal cavity 60cms (2 feet) wide. Concrete made on site using basalt chippings was then poured into the cavity.

At some point, presumably well after the invasion threat had diminished, the pillbox was evidently used for a training exercise. The west wall bears the impact marks of six bullets, probably rifle rounds, while the wall face below the firing embrasure has been damaged more severely by an explosion. This may have occurred when an unsuccessful attempt was made to sling a satchel charge into the interior through the embrasure. It is tempting to link the bullet impacts with the discovery of six spent .303 rifle rounds (undated) on high ground overlooking the pillbox, 260m to the west.

10.4 The wreck of the Cold War 'spy trawler'

Local residents recall that in 1969, at the height of the Cold War, the skipper of a Polish-registered fishing trawler deliberately ran the vessel onto the rocks of Nova Scotia beach and claimed asylum for himself and the crew. The boat reportedly carried an abnormal number of aerials and that the entire crew were soon bundled into a car and driven away by staff from the Russian embassy. It has been assumed that the boat was engaged in spying activities.

A few scattered, rusting elements of the hull of the trawler are closely associated with a small clear patch amongst the boulders, which is evidently where the boat rested for some time.

11. DISCUSSION

Hunter Blair's (1949, 26) observation that Dunstanburgh Castle occupies 'a lonely, inaccessible site far removed from the usual lines of Scottish invasion' succinctly sums up the question that has intrigued historians from the 19th century onwards: why was the castle built here at all, and on such a grand scale? The new understanding of the setting and architectural affinities of Dunstanburgh has clear implications for interpreting the purpose and significance of the castle, and for re-assessing its place within the current wider debate about the functions of medieval castles.

Recent trends within castle studies have moved towards an interest in the role of these monuments as symbolic expressions of authority (for example, Johnson 2002; Wheatley 2004). The most recent and authoritative treatment of Dunstanburgh took account of this to some degree and set the castle against the shifting allegiances in Northumberland during Thomas of Lancaster's possession of the earldom (King 2001). This discussion contained an important re-assessment of local political realities, with a particular revision of the importance of Earl Thomas. Far from being a major power, Thomas of Lancaster had little stake in Northumberland: his power-base was in Yorkshire and the Midlands, and his Northumbrian affinity consisted largely of gentry, with a particular concentration of figures of notoriety, rebels and *schavaldours* (bandits, many of them with connections to the royal household). With such tenuous connections to Northumberland, Thomas's reasons for building a castle on such a lavish and costly scale are all the more intriguing. King concluded from an examination of the fabric that Dunstanburgh was, after all, a genuinely 'military' castle. Its power as a monument was the product of a carefully chosen site, maximising the defensive potential of high cliffs and the sea. King was aware of the debate about the 'symbolic' aspects of the castle's design, but found a functional military rationale more convincing. According to King's interpretation, Thomas chose the castle's site and design with every expectation that he would have to defend it by force.

Summerson begins his account by echoing Hunter Blair's observation about the remoteness of the site, but he too goes on to interpret the castle's function in fairly conventional terms as a refuge for the local population (Summerson 1993, 7 & 23-4). Whether or not his vivid evocation of refugees from Embleton and Rennington escaping from Scottish raiders into the castle is to be believed, it is undoubtedly the case that on occasions, notably during the Anglo-Scottish hostilities of the 1340s, the castle sheltered local people and their livestock from marauding Scots. Discussing its ability to perform the same role in the mid-16th century, Pounds (1990, 206) takes Sir Robert Bowes comment that the castle was 'a great refuge to the inhabitants of those partes' out of context, for Bowes is in fact speculating that the castle could be such a refuge, if extensively repaired. Yet Dunstanburgh lay about 3kms from Embleton and other settlements, so a lengthy warning would have needed to allow people, together with their livestock and household possessions, to reach the safety of the walls at any point in its history.

These comments about the defensive practicalities of Dunstanburgh are superseded by the new observations and discoveries, notably the 'designed landscape' setting of the castle and the symbolism clearly embedded in the architecture. Yet King's assessment of the political circumstances is more likely to remain valid. As has been acknowledged since the 19th century, Dunstanburgh Castle was much more important in the politics of the English than the Scots (who never seem to have thought it worth attacking, and who in any case were often in league with the Earl). The experience of 1322 showed that Dunstanburgh was partly valued by Earl Thomas precisely because it was located so far away from the English political centre: it provided a bolt-hole to which he and his faction could escape, and which would also allow him to evade any pursuers by sea, exactly as Edward II had done at Tynemouth a decade earlier. It was a thorn in the side of the nearby royal castle at Bamburgh, and it served as a base for the administration of a (fairly small) local estate. However, the most practical reason behind Earl Thomas's building a castle in Northumberland was perhaps simple self-preservation.

This said, Dunstanburgh was clearly not an inconspicuous hiding place and the new findings reinforce the theory that Thomas of Lancaster's design embodied important ornamental and symbolic significance. Rather than being solely defensive features, the meres make more sense as *vivaria*, as habitats for fish and wildfowl, as a practical means of controlling the approach to the castle by designated crossing-points, and as purely ornamental features. It is remarkable that Thomas considered the meres at Dunstanburgh to be of sufficiently high priority that he ordered construction of the moat to begin at the same time as his great gatehouse. Similar meres surrounding or adjacent to castles include those at Framlingham in Suffolk, Kenilworth in Warwickshire, Whittington in Shropshire and Leeds in Kent, created respectively by 1175, 1210 or earlier, c.1221 and c.1272. Such 'watery landscapes', which reflected the view of the architecture and doubtless added considerably to the power of the building to impress and overawe, have become an important focus of interest and debate in recent years (Everson *et al* 1990; Everson 1996; Johnson 2002).

At one level, Dunstanburgh's military strength and designed landscape setting – as well as the astonishing wealth these implied – can be seen as symbols appropriate to a good and powerful lord. In the context of Thomas of Lancaster's feud with Edward II, this may have been intended as an implied criticism of Edward's poor lordship of his realm. Dunstanburgh's intervisibility with Bamburgh Castle, enhanced by the lofty and elegant Lilburn Tower, may have been important to this symbolism.

However, it is possible that Dunstanburgh embodied a far more complex metaphor. It is proposed here that the encirclement of the castle by water incarnated a literary convention and that Thomas was implicitly referring to the mythology of King Arthur and his final resting-place on the Isle of Avalon. The medieval defences seem to have physically incorporated an earthwork that was evidently of much earlier origin (that is, the rampart of the supposed Iron Age promontory fort). This earthwork might have stood generically for ancient authority or even specifically for Camelot itself. Coupled with the incorporation of a reference to this antecedent in the castle's name, an act which also had a good practical rationale may have

been part and parcel of the same phenomenon: the deliberate manufacturing of an Arthurian pedigree.

During the height of its popularity among the English aristocracy between the 13th and 15th centuries, Arthurian mythology was extremely politically potent. At its most powerful, it could suggest an older and more legitimate claim to the English throne. Through carefully contrived symbolism which invited political peers to assume that they were looking at the site of Camelot, certain ambitious lords invited the further inference that they themselves were the rightful King of the Britons, come to rule again. Stated explicitly, this would have been a treasonable claim. To take a relatively well established example, Earl Richard of Cornwall's decision in 1233 to construct a castle at Tintagel, another coastal peninsular with obvious prehistoric ramparts, may have been designed to invite the inference that he occupied the ancient stronghold of past Cornish kings. If the castle was indeed first built nearly a century earlier by Earl Reginald, only a few years after the publication in 1139 of Geoffrey of Monmouth's *History of the Kings of Britain*, the account which first linked Tintagel with Arthur's conception, this might represent an earlier attempt to implicitly convey the same message. For Reginald was not only the illegitimate son of Henry I, and thus a man who, like Arthur, might one day return from the shadows to claim the throne of England, but also the brother of Robert Earl of Gloucester, the wealthy patron of Geoffrey of Monmouth. In short, Reginald, like Thomas of Lancaster, was a man with both the motivation and the opportunity to manufacture an Arthurian pedigree.

It has not proved possible to trace the tradition of folklore associated with Dunstanburgh, much of which has a distinctly Arthurian whiff, back to the apogee of the castle in the 14th century. Nevertheless, Thomas of Lancaster was undoubtedly well aware of the power of Arthurian mythology and its political ramifications. Among the correspondence that allegedly passed between him and fellow conspirators in Scotland was a letter closed with the seal of Sir James Douglas, sent to '*Roi Arthur*', generally accepted as a pseudonym for Thomas himself, and he was described in the same terms by popular ballads of the time (Rymer 1818, 474; Bateson 1895, 198; Rowland 1980, 46). This may also lie behind the story, related in the *Brut*, that at his trial in Pontefract Castle, he was mockingly saluted as 'O Kyng Arthur, most dredeful!' (Brie 1906, 222). Cadwallader Bates (1895, 198) presciently remarked that the great gatehouse would once have accommodated the reversionary court of Thomas of Lancaster, 'whose foible it was to assume the character of King Arthur in the pageants of the court.' He also commented on Lancaster's 'evident intention of creating here a veritable 'Joyous Garde', the mythical castle of Sir Launcelot of the Lake, though this concept really originates with Malory in the 15th century, rather than the Arthurian obsession of Thomas's own age. OH Ewing, writing in the early 20th century in his book-length poem, *Dunstanburgh: a Metrical History*, also refers to Thomas' re-enactments of Arthurian pageants, representing himself as 'that great Britannic King', but his account relies heavily upon Bateson's (Ewing 1919, 13). In addition, John of Gaunt, who heavily remodelled much of the castle, was himself an aficionado of Arthurian mythology, and a member of the Order of the Garter, Edward III's (1327-77) attempt to create a lineal descendant of King Arthur's fellowship (Holmes 1984; Keen 1990, 141-2).

It may also be suggested that the overall form of the castle also made specific reference to another castle: Kenilworth Castle in Warwickshire, another stronghold of Thomas of Lancaster. Like the barony of Embleton, and the earldom of Leicester, Kenilworth had passed to Thomas from the dispersed property of Simon de Montfort (c.1206-65). Thomas identified closely with Simon; his faction, the Lords Ordainer, was explicitly inspired by Simon's party, the baronial enforcers of the Provisions of Oxford (Maddicott 1970; 1994). Some of the similarities of the two earls' careers may have been over-emphasised by modern historians, but the association between the two figures was made by writers in the Middle Ages (Brie 1906, 207), and the case for a historical connection between Dunstanburgh and Kenilworth is a strong one. Most obvious, the lesson of history, that in 1265-66 Kenilworth had been the final outpost for Simon's supporters after his death at Evesham, is unlikely to have been quickly forgotten; chronicle descriptions of the royalists' siege of Kenilworth leave no doubt that the castle had proved extremely hard to break. This has clear resonances with the dénouement of Thomas of Lancaster's story in 1322, when, after the failure of his rebellion, he was persuaded by his confederates to make for the safety of Dunstanburgh. As Kenilworth had been, Dunstanburgh was seen as a fortress of last resort.

There are similarities in the physical form of Dunstanburgh and Kenilworth Castles. The system of meres is one of the most distinctive features of Kenilworth and it is entirely plausible that Kenilworth was in Earl Thomas's mind when the new castle at Dunstanburgh was being planned. In the same roll as the 1313 ground works at Dunstanburgh are entries for extensive renovations carried out by Earl Thomas at Kenilworth in the same year, including the construction of a new granary, repairs to various chambers and to the Norman keep; some items are recorded as personal orders by Thomas himself (Brie 1906, 207). The mere at Kenilworth is among those items mentioned in the account. A connection with Kenilworth does not explain all the peculiarities of the site: in particular, the gatehouse at Kenilworth was a very modest building when compared with Dunstanburgh. However, it is suggested here that the creation of the meres at Dunstanburgh was influenced by the '*magnum vivarium*' at Kenilworth, symbolising a remarkably complex system of meanings as well as the more pragmatic concerns of defence and food-supply.

The most striking and, prior to the 2003 investigation, largely unexplained feature of Dunstanburgh Castle is that its 'show' frontage faced southwards, and even seawards, rather than towards Embleton, the settlement after which the castle's estate was named and the direction from which most visitors must have approached. In practical terms, the topography has limited influence on the orientation of the great gatehouse. The indirect approach allows the visitor to take in the whole of the castle at a glance from a distance, while individual buildings reveal themselves in sequence at closer quarters. The principle of approaching gatehouses at right angles to the main entrance was long-established: barbicans had been built with this in mind since the early 13th century. Nevertheless, it is very unusual in English castles for the gatehouse to face completely away from the main approach road. The western flank of the gatehouse, while an undeniably massive object, gives little clue to its true architectural form.

In the light of the recent investigation, the full explanation for the orientation of the gatehouse appears to have several components. One hypothesis, yet to be tested by geophysical survey or excavation, is that the gentle slope directly in front of the gatehouse was the intended site of a planned settlement. It is not inconceivable that Thomas of Lancaster initially envisaged the transplantation of the entire settlement. In the case of Beaumaris, Edward I had moved the settlement from Llanfaes. Such a planned settlement would obviously sit neatly within a wider context of planned towns associated with castles, most famously the *bastides* of Central France and their presumed offshoot, the English colonies of Edward I in North Wales, such as Aberystwyth, Conwy, Caernarfon and Beaumaris. Should the existence of such a settlement be confirmed in this position, the need for a south-facing entrance, presumably overlooking an axial street, would be easier to understand. Alternatively, a hunting park could have occupied the expanse within the outer perimeter. At this stage, however, there is no evidence that construction of such a settlement was ever initiated, if indeed it was ever contemplated. The surviving documents suggest that Embleton remained the administrative centre of the Barony throughout the 14th century and later.

The discovery of the castle's 'harbour' may also contribute to an understanding of the orientation of the gatehouse. The designer of the building created a structure which was considerably more imposing from one direction than the others and this must reflect an expectation that it would be viewed from this side, either by many people, or by a few whose opinion was deemed to matter. The importance of sea traffic in the North-East, particularly the transport of the ubiquitous 'sea-coals' (*carbones maris*) from Newcastle, is well-known even in the Middle Ages: the waters off the Northumberland coast would have been busy. Yet it seems more significant that the seaward terminus of the quay lies almost exactly on the axis created by the great gatehouse, so that anyone disembarking from a boat resting against the end of the dock could not have failed to appreciate the full impact of the symmetry of the extraordinary design. It is possible, too, that the alignment of the Lilburn Tower between the gatehouse towers allowed ships to navigate towards and into the harbour safely, or that its siting contributed (perhaps fortuitously) to the ornamental impression. Although sea travel was not generally popular amongst the medieval nobility, its unpopularity has probably been overstated. The predominance of road transport in the itineraries of medieval nobles and princes was usually the result of the location of their manors and castles: when they needed to travel by ship, they were willing to do so (Friel 1995).

It should be noted that on the only occasion in which Thomas of Lancaster may have stayed at the castle, on his way to the siege of Berwick in 1319, he left by road in a train of ox-carts (PRO: DL 28/1/13, m 5d). Yet the theory that the gatehouse was deliberately oriented southwards to impress elite visitors arriving by sea can be supported by precedents elsewhere. With the single exception of Builth, all the royal castles of Edward I in Wales were sited so as to be accessible by ship. Harlech Castle, where the gatehouse actually faces inland, was connected to its harbour by the 'Way from the Sea', a path mentioned in documents from the 1280s (Taylor 2002, 8 & 31). The construction of Rhuddlan Castle was accompanied by massive works to canalise and make navigable the meandering river Clwyd for a distance of two miles, the 'great ditch which runs from the sea as far as the castle'

(Taylor 1987, 11). At Beaumaris Castle on Anglesey, a dock and canal were specifically designed to allow at high tide 'a 40-ton vessel... to come fully-laden right up to the castle gateway' (Taylor 2004a, 9 & 39). While these and other works are readily explicable as military adaptations, allowing a besieged castle to be supplied by ship, this is less clear at Caernarfon and Conwy, where the access from a moored ship leads directly into residential quarters of the castles: at Caernarfon, the water-gate lay under the Eagle Tower, thought to be part of the king's or justiciar's apartment, and at Conwy, the path from the dock to the castle ran through a garden and into the inner courtyard containing the royal apartments (Taylor 2004b, 27 & 44; Taylor 2003, 35-6; Ashbee forthcoming). In these circumstances, it seems much more likely that a convenient (and sophisticated) entrance was being created for important passengers disembarking from a boat. The same concern can be seen in many generations of planning at the Tower of London from the 12th to the 16th centuries, where a succession of water-gates was created to give access into the constantly changing royal apartments and where sea-going vessels as well as royal barges frequently moored (Ashbee unpublished; in preparation). Given the lawlessness of Northumberland in the early 14th century, with the occasional abduction and murder of magnates and officials on the road, it is entirely likely that sea transport would become rather more appealing (King 2003, 115-29).

Returning to the practicalities of the castle's day-to-day use, it may also be observed that Dunstanburgh Castle had the potential to serve three diverse groups. The new investigations indicate that by the 1380s, and possibly from 1313, there were three virtually separate compounds within the larger expanse of the outer ward, each potentially with its own gateway. It is legitimate to infer from the name *donjon* that the primary designation of Thomas of Lancaster's gatehouse was for the lord of Dunstanburgh and his household. This was almost certainly the case from the castle's first establishment: the building originally contained apartments for the Earl, then Duke of Lancaster, and from 1399, the king. The form and layout of John of Gaunt's new enclosure and its buildings indicates that the inner ward functioned together with the gatehouse, providing ancillary structures which could not be accommodated inside the main building. The only contrary note is in a difficult reference from the period immediately after the death of Thomas of Lancaster: an order of August 1323 from Edward II to the constable of Dunstanburgh to repair 'an ancient hall in the castle or another house there' to provide storage. How any building in a ten-year old castle could be described as 'ancient' is hard to comprehend, unless the word was used in the modern French sense of 'former', implying a change of function, or the writ came from someone with no knowledge of Dunstanburgh. Except in the last case, the writ confirms that there were other buildings in the castle's interior from an early date, but this is the only document which suggests that the lord of Dunstanburgh should live anywhere but the main gatehouse (*Calendar of the Close Rolls of Edward II 1323-27*, 12).

The new earthwork survey supports the finding of the 1989 geophysical survey that the castle's constable possessed an enclosure of his own, adjacent to the lord's enclosure of the inner ward, as developed in the 1380s. It is conceivable that the gate beneath the

Egyncleugh Tower, close to the constable's house, was designated as his own private entrance.

The third group needing accommodation in Dunstanburgh Castle was the administrator of the barony of Embleton/lordship of Dunstanburgh and on occasions, the inhabitants of the townships within it. The documentation for the castle regularly speaks of buildings specifically connected with them, including the auditor's chamber (1440) and the barn for the demesne (1454-55). While much of the administration of the Barony was undertaken from buildings in Embleton village, it seems that some form of peace-time role for the castle was also anticipated. John of Gaunt's gatehouse, and the major postern that probably preceded it, is set directly in line with the track from Embleton and this gave access to visitors from Embleton into a third space, defined in part by the earthen bank behind the west curtain wall. It is tempting to speculate that, for as long as the gatehouse of Thomas of Lancaster remained open, these three main entrances to Dunstanburgh Castle served specific individuals or groups: the John of Gaunt gatehouse for those involved in the business of the estate, the Egyncleugh Tower as a private entrance for the constable's house and the gate of Thomas of Lancaster as a grand ceremonial entrance to the inner enclosure and the apartments of the lord or king. At every level, the working of Dunstanburgh Castle seems to have been more sophisticated than previously appreciated.

12. METHODOLOGY

Archaeological and architectural field surveys

The archaeological fieldwork was carried out between November 2003 and January 2004 by Alastair Oswald, Trevor Pearson and Stewart Ainsworth of English Heritage's Archaeological Survey and Investigation Team, with assistance from Kevin Redgrave, the National Trust Warden with responsibility for the environs of Dunstanburgh. A number of digital photographs taken by Alastair Oswald are held on disk as part of the project archive.

The plan of the masonry elements of the castle was derived from the survey made in 1985-6 by a team from Durham University under the direction of Dr Eric Cambridge. The remainder of the survey was carried out using Trimble dual-frequency differential Global Positioning System (GPS) satellite mapping equipment. The base receiver was set up on Scrog Hill overlooking the survey area on a temporary survey station. The co-ordinates of the base receiver were calibrated to the National Grid (OSTN02) using Trimble Geomatics software, based on the position of the receiver relative to the five nearest Ordnance Survey active GPS stations, following an occupation of 18 hours. The position was computed using precise ephemerides and passing the standard chi-squared test after one iteration of the adjustment routine, using an alternative scalar weighting strategy.

Three rover receivers (Trimble 4700 and 6800 models) were used to record the archaeological remains and other features, working independently in real-time kinematic mode. Contours were derived from the same data.

Most of the resulting plan was plotted at 1:1 000 scale via Key Terrafirma AutoCAD software. The plan and interpretation drawings based upon it were prepared by Alastair Oswald and Philip Sinton.

Analysis of the standing fabric of the castle was carried out in stages between July 2004 and August 2006 by Dr Jeremy Ashbee of English Heritage's Properties Presentation Team, Dr Adam Menuge of the Architectural Investigation and Survey Team and Al Oswald.

Palaeoenvironmental sampling

Jacqui Huntley carried out an initial reconnaissance in July 2003, and supervised the main environmental sampling exercise over two days in November 2003 and October 2004. On the first occasion, she was assisted by Tim van der Shreik and Chris Stemerink of Newcastle University, and on the second by Harry Beamish and Kevin Redgrave of the National Trust. A rapid survey was undertaken by coring transects across the basin with a hand-operated 100cm long, 2cm diameter gouge auger, with extension rods as necessary. The positions of the cores taken in November 2003 were surveyed by differential GPS, and those taken in the following October were surveyed by hand-held GPS and related by graphic survey to each other and to features already surveyed more accurately. Depths and broad sediment descriptions were made in the field. Samples of sediment were retained for laboratory investigation.

Historical Research

The review of the documentary sources for the history of the castle, as well as additional analysis of the standing masonry, was undertaken jointly by Alastair Oswald of English Heritage's Archaeological Survey and Investigation Team and Dr Jeremy Ashbee of the Properties Presentation Team. The main part of the report was researched and written by them and edited by Stewart Ainsworth. Although the originals of many documentary sources were consulted first hand, Northumberland County Record Office was temporarily closed for reorganization for much of the project, so in some instances this account has relied upon the research carried out in the 1980s by Eric Cambridge.

The site archive has been deposited in English Heritage's National Monuments Record, Great Western Village, Kemble Drive, Swindon SN2 2GZ, to where applications for copyright should be made.

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13. ACKNOWLEDGEMENTS

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Paul Everson, Professor Matthew Johnson and Professor Philip Dixon all contributed to the understanding of the site in the course of a field visit. David Heslop examined photographs of the rediscovered quern stones. Tim Gates not only agreed to the reproduction of his outstanding aerial photograph, but made an important contribution to the discussion of the likely nature of the prehistoric use of the site.

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Appendix 1: Results of palaeoenvironmental coring

Core 1: NU 25522 21987

0-46cms	silty organic, highly humified, very dry – soil. Becoming damper below
46-50	darker brown, more organic but highly humified, more or less greasy
50-129	dark brown moist humified peat, monocot root sheaths. Continuation of above segment
129-199	scattered shells throughout, slightly yellower brown and more humified, almost gyttja. Sampled

Core 2: NU 25505 21984

0-39cms	dry humified silty organic – soil
30-50	heavy, gleyed clay
50-123	humified dark brown organic – monocot fragments.
123-138	yellower brown and more monocot debris
138-167	more humified and darker brown, few obvious plant remains
167-220	scattered shells, greasy yellow brown humified peat, occasional monocot fragments
220-325	almost gyttja, occasional sand but mostly organic; very occasional shells, soft organic, no sand, no silt
325-357	becoming more clay rich but still lots of organic. Very occasional sand. sampled 340-350.
357-386	gravel with some organic. Sampled
386-400	yellow grey clay. Sampled

Core 3: NU 25479 21982

0-36cms	dry crumbly soil
36-50	stiff clay
50-82	well humified organic becoming more monocot rich
82-150	yellow brown monocot rich; chunk of wood at 120 and narrow band of coarse sand from 134-137
150-213	similar but more wood chunks and twigs and less monocot; occasional lens of sand (175-185cm sampled).
213-278	sharp boundary to soft grey clay with occasional sand and gravel inclusions. Becoming much stiffer below but still with some sand and occasional piece of gravel.

Core 4: NU 25528 21949

0-38cms	dry crumbly soil
38-50	more clay-rich, firm and dry, not crumbly.
50-93	dark brown humified peat
93-190	yellow brown monocot peat with occasional pieces of wood and patches of more, or less, monocot. Wood 274-276 sampled for radiocarbon.
190-191	grey sand
191	hit stone

Core 5: NU 25509 21946

0-25cms	soil profile with dry crumbly clay at bottom.
25-112	dark brown humified peat
112-223	becoming yellower brown and more monocot remains as in other cores.
223-250	grey clay with some sand
250-272	clay

Core 6: NU 25489 21940

0-36cms	soil under which dry crumbly clay.
36-150	dark brown humified peat but with patches of monocot rich peat
150-209	rather similar to above with patches of dense monocot peat. Hints of sand at the bottom.
209-288	dark red brown fairly humified peat with twigs. 280-288 twigs sampled for radiocarbon.
288-300	gravel becoming clay rich

Core 7: NU 25459 21938

0-48cms	top soil over dry crumbly clay.
48-216	dark brown humified peat with more monocot remains obvious at about 80-100; rotted stone and a few wood fragments 186-187cm.
216	rock

Core 8: NU 25426 21897

0-50cms	soil becoming stiff clay at 48
50-99	clay
99-200	very dark red brown, wood peat. Sand lens at 156-157, chunk of wood at 167 and more mineral in the matrix from 182 with chunks of wood and patchy clay/sand
200-232	clay and gravel – the usual pink and grey gleyed effect.

Core 9: NU 25447 21902

0-50cms	crumbly soil
50-74	clay
74-84	dark brown humified peat
84-95	clay
95-200	dark red-brown humified wood peat with chunks of wood 100-150.
200-226	grey clay with occasional sand.

Core 10: NU 25475 21902

0-50cms	soil with clay under
50-110	dark brown wood peat becoming highly humified peat
110-200	becoming more monocot rich but losing evidence of chunks of wood; getting softer and wetter.
200-218	gradual boundary to mineral – grey clay, stone and gravel. Wood sampled 205-215
218-250	clays and sands. Wood at 226 and 240-250 (latter 10cms sampled).

Core 11: NU 25513 21905

0-25cms	soil
25-35	dark red humified peat
35-40	clay
40-120	dark red humified wood peat
120-150	grey clay and sand

Core 12: NU 25520 22007

0-50cms	soil and crumbly clay becoming organic
50-150	well humified dark brown peat becoming more monocot rich below
150-200	shells scattered from 183cm. Monocot rich
200-250	highly humified yellow brown, more like gyttja. Shells scattered throughout, some sand.
250-387	wetter; fewer obvious monocot remains – probably same stratigraphic unit as above though. (sampled 270-300; 330-350)
387-400	clay but still with the shells. 380-400 sampled.

Core 13: NU 25494 21833

0-10cms top soil
10-20 more mineral and lumpy
20-100 grey gleyed clay, very stiff
100-110 slightly more organic, some peat
110-(130) grey gritty clay

Core 14: NU 25494 21858

0-45cms top soil and clay
45-60 clay and organic mix, humified
60-125 black organic, some peat
125-(130) gritty grey clay and occasional fragments rotted whinstone

Core 15: NU 25494 21883

0-55cms top soil and clay
55-115 black humified organic
115-140 monocot rich peat
140-180 organic
180-(190) grey gritty clay

Core 16: NU 25494 21793

0-100cms clay and into grey gritty gravel

Core 17: NU 25494 21803

0-120cms clay
120-130 dark brown black organic
130-140 sandy clay, slight banding apparent

Core 18: NU 25438 21853

0-100cms clay

Core 19: NU 25457 21847

0-100cms absolutely solid clay, suitable for pot-making
115-125 mineral with some organic
125-135 organic, dark brown peat, highly humified
135-195 gritty grey clay and bottomed on rock or similar; bands of sandy organic from 165 cm onwards

Core 20: NU 25475 21840

0-110cms clay and fine mineral with strange wet gaps in the stratigraphy. Tried 3 separate holes but all the same
110-130 sandy with clay

Core 22: NU 25494 21728

0-90cms topsoil and clay
90-140 somewhat organic clay
140-150 peat
150-180 grey gritty clay

Core 22: NU 25624 21523

0-30cms top soil
30-70 clay

Core 23: NU 25668 21530

0-50 clay
50-100 peat



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