



February 2000

RAVENGLASS FORT

CUMBRIA

Watching Brief Report

Ravenglass Roman Fort
Cumbria

Archaeological Watching Report

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The fieldwork was undertaken by Vix Hughes, who also compiled this report. The report was edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

SUMMARY

Lancaster University Archaeological Unit (LUAU) undertook a watching brief during a period of vegetation clearance on the site of the Roman fort at Ravenglass (NGR SD 088958) in October 1999, which is designated as a Scheduled Ancient Monument (SAM 268). The work was undertaken in accordance with a methodology prepared by LUAU in response to a verbal brief from the Lake District National Park Authority.

The watching brief was undertaken after the felling of trees on the main part of the fort and to the east of the railway, prior to being grassed over. The work consisted of recording the location of wind blown trees and the associated disturbance, and was achieved using a Global Positioning System (GPS). Each of the disturbances was then recorded and evaluated with particular attention paid to any finds or elements of the fort which may have been exposed.

In total 17 tree stumps and hollows on the site were looked at, along with several possible areas of archaeology, and an area of Victorian building material. The study resulted in a catalogue and showed the locations of areas where the archaeology of the underlying fort may have been compromised; as such it provides a baseline for documenting any denudation of the site and its state of preservation in the future.

1. INTRODUCTION

1.1 CONTRACT BACKGROUND

- 1.1.1 A watching brief was undertaken by Lancaster University Archaeological Unit (LUAU) during October 1999 when the vegetation was being cleared and general maintenance of the site was taking place. A large number of trees had been cut down and the work took place prior to the stumps being ground down and wood chippings being spread over the entire area, before grass seed was sown.
- 1.1.2 The watching brief was carried out by LUAU in response to a verbal brief by the Lake District National Park Archaeologist. This provided for a suitable level of archaeological observation, and recording of all archaeological features or deposits encountered during the watching brief.

1.2 SITE DESCRIPTION

- 1.2.1 Ravenglass Roman fort is situated on the west coast of Cumbria (NGR SD 088 958), on the Esk Estuary, and is designated as a Scheduled Ancient Monument, and is part of the Hadrian's Wall World Heritage Site. The area is mostly flat and lies at approximately 10m AOD. The site is on typical Brown Earths of the Wick 1 series (Lawes Agricultural Trust 1983) and the underlying geology comprised red and grey sandstones and mudstones (Ordnance Survey 1979). The fort is one and half miles inland from the coastline.
- 1.2.2 The fort covers an approximate area of 3.6 acres / 1.5ha although it is not easy to '*estimate either its size and orientation or the number and position of its gates*' (Bellhouse 1989, 62), due to the ground cover over the site. The fort has until the present time been obscured forestry, as demonstrated by St Joseph's aerial photograph taken in the 1950s (Birley 1958). Although the fort has been obscured, there are the standing remains of the bath house to the immediate north-east of the fort, which is the most complete Roman standing structure in Britain (Bidwell 1997, 81; Brann 1985).

1.3 HISTORICAL BACKGROUND

- 1.3.1 The first reference to a Roman site at Ravenglass is by Camden (1600), where it is described as '*a station conveniently girt by two rivers where Roman inscriptions, as I have been informed exist*'. The remains of the bath house, known as Walls Castle, which is to the north-east of the fort, were inhabited, possibly from the twelfth and thirteenth centuries (Bidwell 1997, 110) and was home to the Penningtons, probably from c1610 (Birley 1958, 15).
- 1.3.2 Various workers have made interpretations of the fort at Ravenglass and attempted to put it within the wider context of the Roman landscape, and is summarised by Burley (1958). It was the southernmost installation in a chain of forts down the Cumbrian coast, serving as an extension to Hadrian's Wall, and, lying adjacent to a natural harbour, must have acted as a port, for which there were supply communications extending along both the coast and also inland via Hardknott pass (Birley 1958).
- 1.3.3 The site was badly compromised by the construction of the Furness Junction narrow gauge railway which cut through the western part of the site in 1848 (Rollinson 1996), leaving a small island along the coast side, with the majority of it inland to the east.

- 1.3.4 Following a landslide in 1925, Margaret Fair (1925) took an interest in the fort and observed structural finds, such as bricks, floor *tesserae*, *tegulae*, and tiles which implied a heated building other than the bath house, and may have been a *mansio* for boarding guests. From 1927 onwards she kept an unofficial watching brief on the site and recovered finds from areas of erosion and noted any visible structural remains (Birley 1958, 22-3).
- 1.3.5 In 1978 excavations were carried out on the coastal side of the railway which helped to establish a likely stratigraphic sequence for the site (Potter 1979) although the interpretation given from such results has been doubted by other workers (Bellhouse 1989; Brandon 1984). The excavations suggested that a ditched, and possibly palisaded, fort was constructed about AD 120, which was subsequently given a turf rampart in AD 130. Sometime between AD 190 and AD 210, the fort seems to have been demolished and then immediately rebuilt, with occupation continuing until at least AD 350-370 and probably later.

2. METHODOLOGY

2.1 WATCHING BRIEF

- 2.1.1 The exposure of the ground by felling trees on the main area of the fort, to the east of the railway, allowed a rare opportunity to estimate the amount of possible damage from the uprooting of trees and to evaluate the impact on the preservation of the archaeological remains. Up until this point the whole of the fort's platform east of the railway had been covered by dense plantation, which made it virtually impossible to access it (Birley 1958, 24).
- 2.1.2 The main aims of the work were to identify areas of ground disturbance, primarily as a result of trees being blown down, and also to undertake a walkover survey of the site, observing any pertinent features or finds. No work had been undertaken on this part of the fort because of the problem of access.
- 2.1.3 The programme of field observation accurately recorded the position of the stumps, hollows and disturbance, using a Leica differential GPS system, which can record to an accuracy of +/- 0.3m. Tree stumps were identified as having been blown over or uprooted, both by visual means and with advice from Alex Todd (LDNPA) who was present throughout. The stumps were located by GPS and in addition, the top break of slope of the fort's rampart was surveyed to provide a context to situate the stumps.
- 2.1.4 A full written record was made of each disturbance, as well as any possible archaeological remains. Recording was in the form of site notes, recovery of surface finds, and by photographic recording. The photography was undertaken using black and white print and colour slide film, which provided a record of the general context and the individual areas of disturbance. On-site assessment of the disturbances was conducted.

2.2 ARCHIVE

- 2.2.1 A full archive of the work has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited with the County Record Office and a copy of the report will be given to the Cumbria SMR.

3. WATCHING BRIEF RESULTS

3.1 TREE DISTURBANCE SITES

- 3.1.1 In total 17 tree stumps and hollows were identified and located, 15 of which were in the main area of the fort, to the east of the railway, and a further two were to the east beyond the access road. In addition, three sites of possible masonry were identified and recorded. The following results have been grouped according to the ratings given in the field: Group 1 consists of the tree stumps and hollows where masonry was clearly visible; Group 2 comprised fully exposed hollows with no visible stones; and Group 3 were those where the stump hollow was obscured. Where exposed, the underlying deposits were mostly a light pinkish brown silty clay. There was no dominant direction in which the trees had fallen, and in some cases the trees may have toppled due to gradient as well as high winds. It is suggested that most of the trees blew down in the winter months of 1997 and 1998 (Alex Todd, *pers comm*) although it was difficult to confirm this from the surface evidence.
- 3.1.2 **Group 1:** four locations (Sites 9, 11, 12 and 14) had clearly visible stones associated with them. Site 9 was the remains of a tree which had blown over, and then been righted; despite this, one block of sandstone was visible beneath. Site 11 had one squared fragment of sandstone and three or four sub-rounded fragments. Site 12 revealed only one fragment of squared sandstone. Both Sites 11 and 12 were located in close proximity along the north side of the fort at the base of the rampart bank (Plate 3). Site 14 was to the north-west of Sites 11 and 12 and beyond the fort ramparts; it comprised several sub-rounded 'cobbles' visible through exposed roots (Plate 2).
- 3.1.3 **Group 2:** this group revealed no signs of any masonry, stones or any other archaeological features. The tree hollows were all fully exposed, usually because the trees had been blown over and had not been righted, leaving the tree bowls upstanding (Plate 4). The remains, however, were not always visible due to the fact that, since the trees had fallen, their hollows had become overgrown. The sites in this group included 1, 2, 3, 13, and 15. They were scattered randomly across the study area although Sites 1, 2 and 3 were clustered together on the south side of the fort and all the trees had been blown to the south. Stump 13 had not obviously been blown over but there was significant disturbance from erosion and a section was visible including an horizon of humic material (0.2m), a greyish brown silt (0.12m) and, at the base, a reddish brown deposit (0.25m+). Site 15 revealed nothing.
- 3.1.4 **Group 3:** this group consisted of those trees that had blown over, yet continued to grow, or their stumps had been righted by the Lake District National Park staff. This group comprised Sites 4, 5, 6, 7 and 8, and were all located on the central raised area of the fort itself. It was difficult to determine which way the trees had blown over and visibility within the hollows was minimal. Site 4 was clearly the oldest, having become completely earthfast. There were also two further stumps in the nearby area which may have been blown over or may simply have grown at an angle due to the prevailing westerly winds.

3.2 ARCHAEOLOGICAL FEATURES

- 3.2.1 In addition to the sites of the tree stumps, the walkover noted the presence of several early twentieth century glass bottles strewn about and it is possible that the area may have been subject to rubbish disposal. A further find was a large amount of building material at the

north-eastern corner of the fort. It consisted of the broken remains of a patterned tiled floor, cement fragments and occasional bricks, although it was not possible to confirm from the surface evidence if the material was dumped or *in situ*. If it were *in situ*, it would have significant implications for the survival of archaeology below.

- 3.2.2 The masonry sites identified (M1, M2 and M3) consisted of a block of amorphous stones in the centre of the fort (M1), and two areas of loose stone on the surface along the northern edge, lying in the ditch (M2 and M3). Plate 3 shows the scattering of both squared and amorphous stones in the area of Sites 11, 12 and 13. These stones were in an approximate east/west alignment and were composed of granite and sandstone. To the north of this area was a collection of four fragments of mixed material. None of the stones appeared to be *in situ*.

4. CONCLUSIONS

- 4.1 The results of the watching brief suggest that there has probably been some limited damage to the underlying stratigraphy of the fort with most of the trees exposing either the brownish subsoil beneath or only disturbing the humic horizon. Site 13 gave some suggestion of deposits remaining along the northern side of the fort, which may relate to rampart construction. There was some evidence of stones within the fort which may derive from underlying Roman stratigraphy, either dislodged by the trees being uprooted or left behind from stone robbing.
- 4.2 The location of the Victorian building debris could have more serious implications as to the degree of preservation below, depending on whether it can be established if it was a dump or *in situ* structure. No records were identified to account for a structure here but it possibly relates to activity from the nearby properties to the south.
- 4.3 The on-site burning of gathered plant debris is likely to have caused only minimal contamination to the underlying Roman contexts. The addition of tree stump grindings and grass planting is unlikely to affect the Roman deposits although the use of heavy machinery over the site should only be undertaken with caution.

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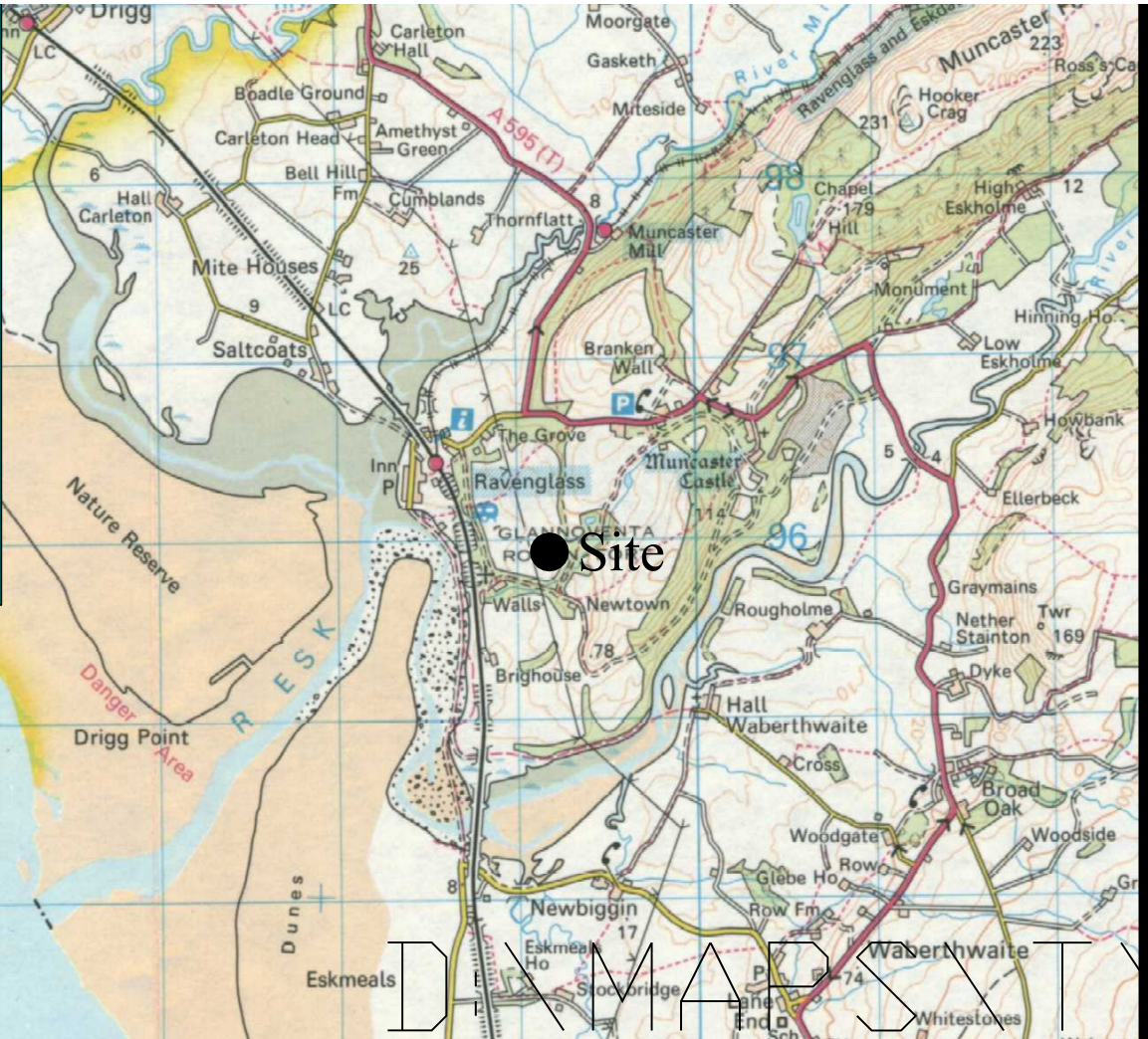
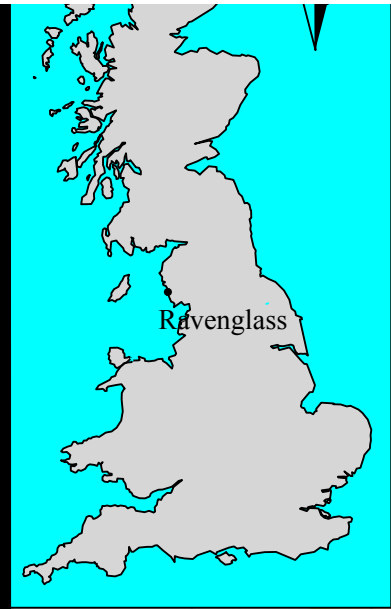
ILLUSTRATIONS

Fig 1 Site Location

Fig 2 General Site Map

PLATES

- Plate 1 Cleared area of fort: bath house in foreground - looking south
- Plate 2 Site 14 with stones revealed in cavity
- Plate 3 Sites 11 - 13 and strewn stones, looking east
- Plate 4 Site 1, looking south
- Plate 5 Sites 7-9, looking south-east



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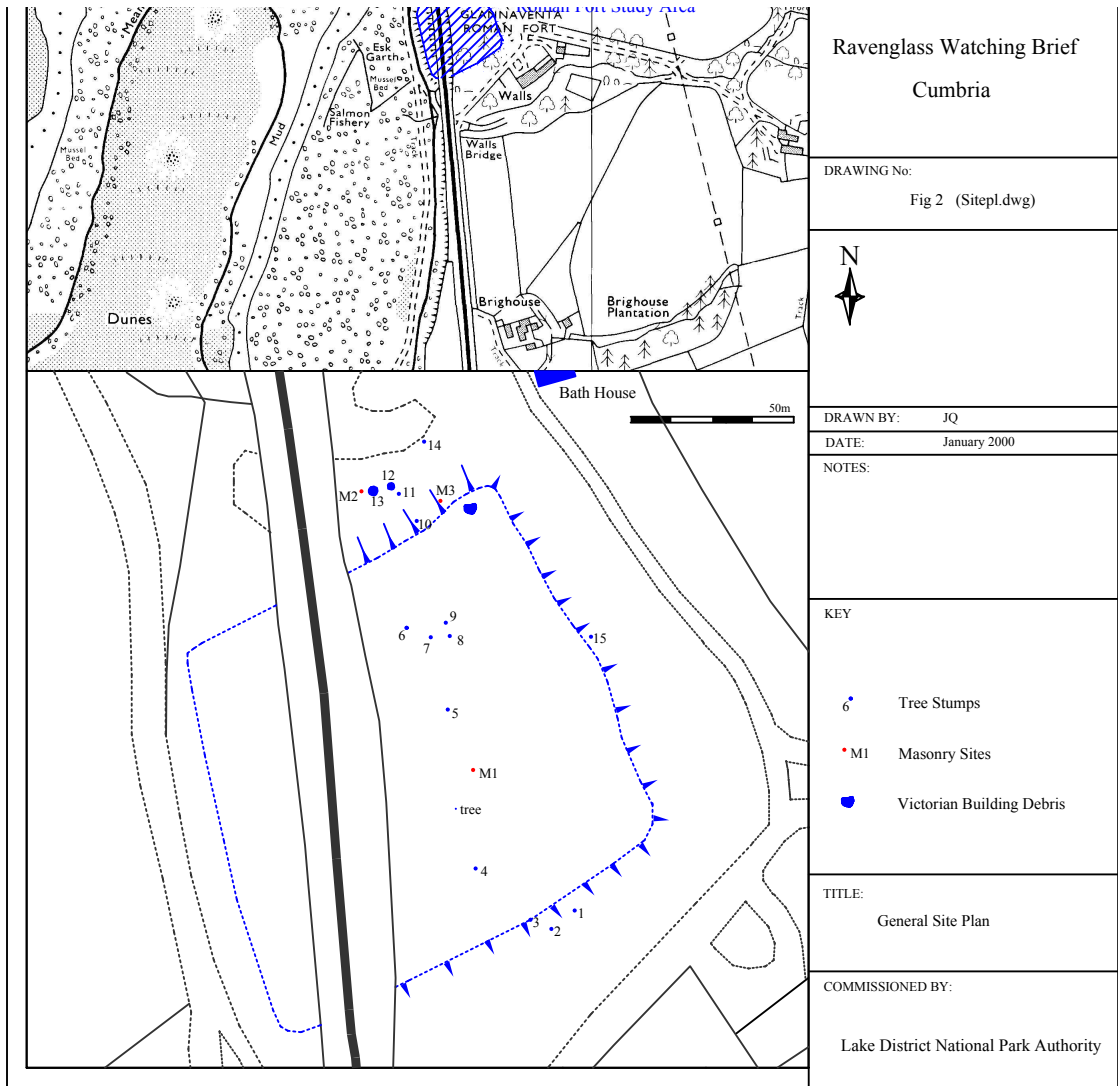


Fig 2: Ravenglass General Site Map



Plate 1 Cleared area of fort: bathhouse in foreground looking south



Plate 2 Site 14 with stones revealed in cavity



Plate 3 Sites 11-13 and strewn stones, looking east.



Plate 4 Site 1, looking south



Plate 5 Sites 7-9 looking south-east