NORTH PENNINES ARCHAEOLOGY LTD

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AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

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Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

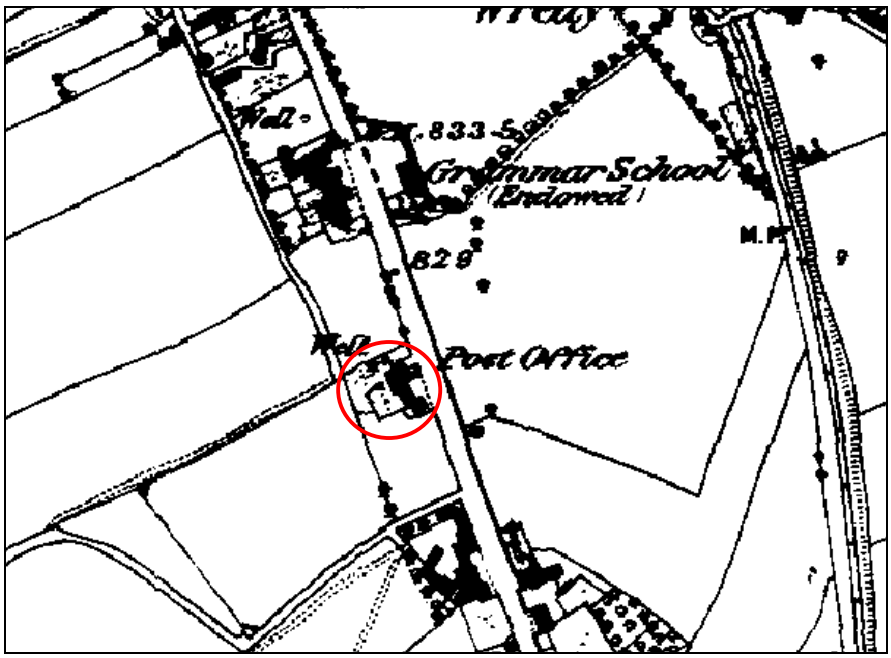

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

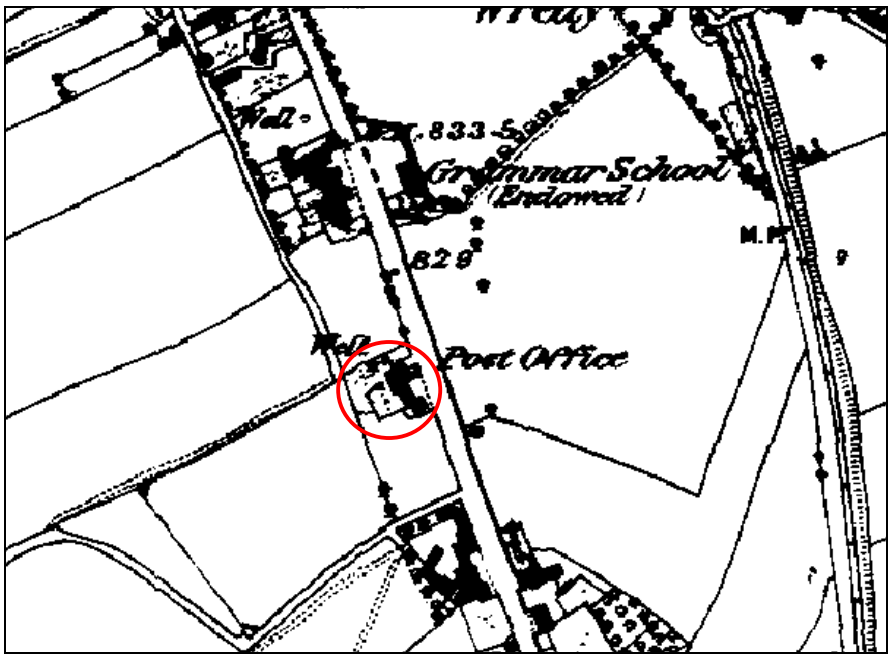

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

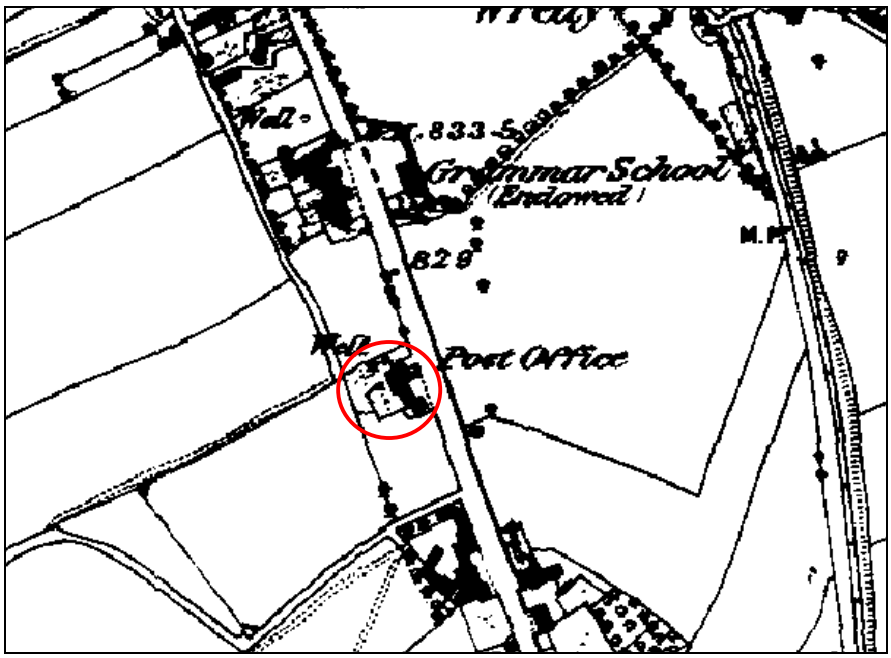

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

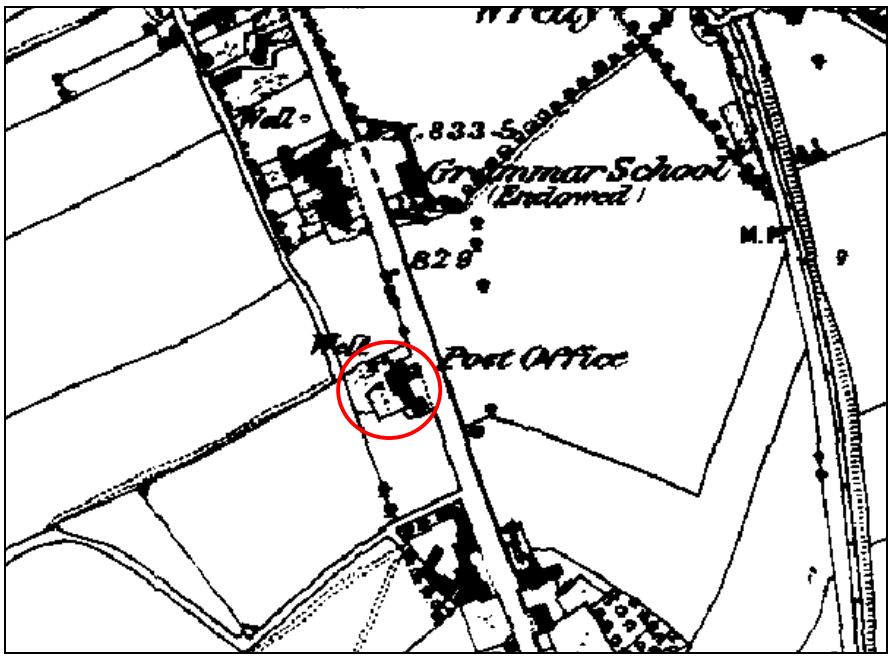

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

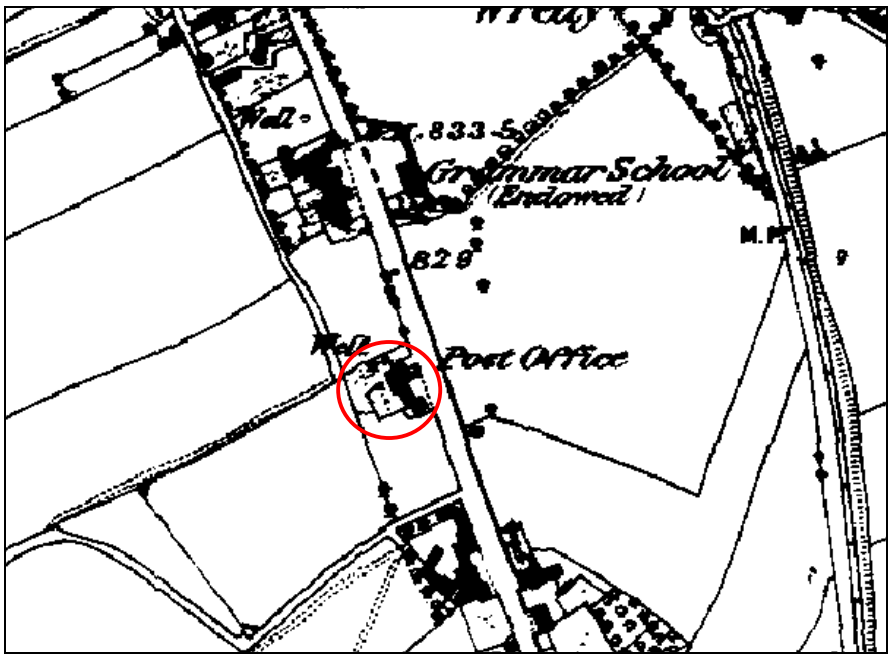

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

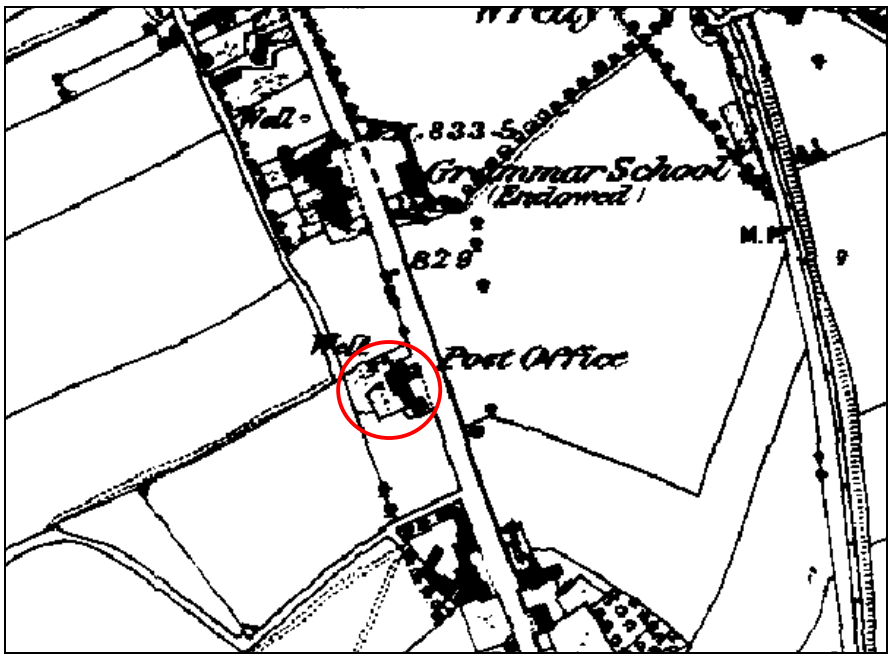

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

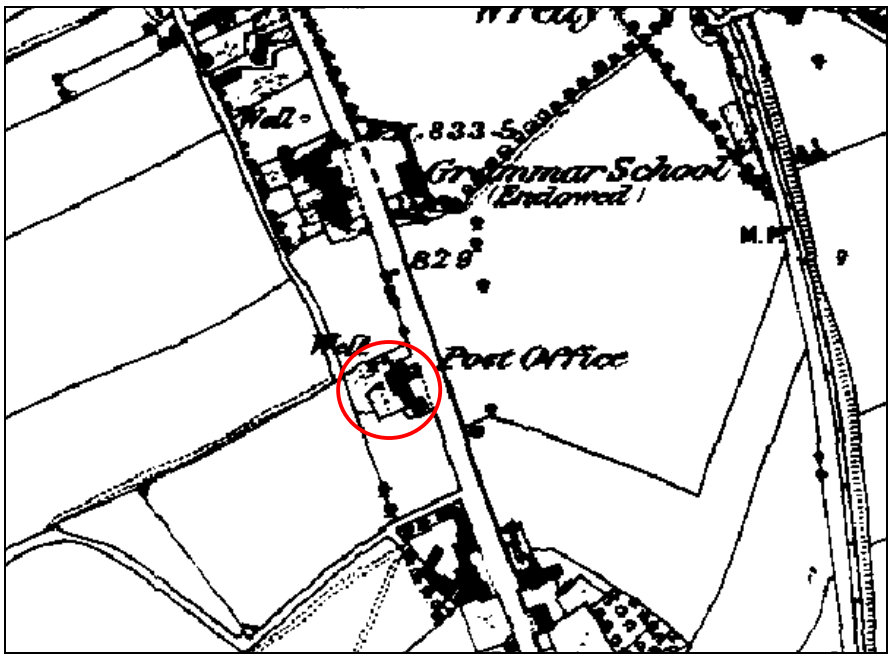

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP734/08 **July 2008**

AN ARCHAEOLOGICAL WATCHING BRIEF AT ALLANDALE, SHAP, CUMBRIA

FOR

MR JOHN ABBOTT

NGR NY 5627 1507

OASIS REF: northpen3-46130

Martin Railton BA (Hons) MA AIFA,
Patricia Shaw BSc (Hons) and Rachel Horn BSc (Hons) MSc
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382294
Email: info@nparchaeology.co.uk

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust
Company Registration No. 4847034 VAT Registration No. 817 2284 31

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EXECUTIVE SUMMARY

In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria. Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

The watching brief was undertaken at the rear of Allandale between 30th June and 2nd July 2008, during the excavation of foundation trenches for the extension to the existing garage. This was situated in the back garden, immediately to the north of the house. Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this, as would be expected from a collection that contains older individuals.

The human remains were reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to offer thanks to Mr John Abbott for his assistance throughout the project. North Pennines Archaeology Ltd would also like to extend their thanks to the staff at the Cumbria Record Office in Kendal, Dr Anne Bell, Clerk of the Penrith Quaker Meeting House, and David Butler, for their advice and assistance.

The archaeological watching brief was undertaken by Patricia Shaw, NPA Project Supervisor. The rapid desk-based assessment was undertaken by Martin Railton, NPA Project Manager. The human bone assessment was undertaken by Rachel Horn, NPA Project Assistant. The report was written and illustrated by Martin Railton, with contributions by Patricia Shaw and Rachel Horn. The project was managed by Martin Railton, NPA Project Manager.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 In June 2008, North Pennines Archaeology Ltd were commissioned by Mr John Abbott to undertake an archaeological watching brief in the garden of a private dwelling known as Allandale, in Shap, Cumbria (Figure 1). Human remains had been discovered at the site during the excavation of trenches for a garage extension to the rear of the property (centred on NGR NY 5627 1507). The site was visited by Jeremy Parsons, Assistant County Archaeologist, Cumbria County Council Historic Environment Service (CCCHES), who recommended that an archaeological watching brief be undertaken during all subsequent groundworks at the site.

1.1.2 Allandale was the site of the Shap Quaker Meeting House between 1704 and 1778, and the human remains discovered at the site were believed to be from an associated Quaker burial ground. The property was sold in 1803, and was eventually converted into a private residence. The full extent of the burial ground was not known, but it was considered likely that further burials could be revealed by the excavation.

1.1.3 North Pennines Archaeology Ltd undertook the archaeological watching brief between 30th June and 2nd July 2008. The work was undertaken according to IFA guidelines (2002) and generally accepted best practice. This report outlines the archaeological monitoring undertaken on-site, and the results the archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 Due to the circumstances of the project, no project design was produced for the archaeological watching brief. All work was undertaken according to IFA guidelines (2002) and generally accepted best practice.

2.1.2 The removal of human remains was undertaken under controlled conditions, and in accordance with a Ministry of Justice Licence (Licence No. 08-0063), as set out in Section 25 of the Burial Act, 1857 (20 & 21 Vic., cap.81). Where possible human remains were left *in situ*, as recommended in current English Heritage guidelines (2005).

2.2 THE WATCHING BRIEF

2.2.1 The archaeological monitoring and supervision of groundworks associated with the development commenced on Monday 30th June 2008. The works involved a structured watching brief to observe, record and excavate any archaeological features revealed by the works, and to allow recovery of human remains that would be disturbed by the development. The results of the monitoring are included within this report. A full written, drawn and photographic record of all features of interest was taken, and has been compiled within the site archive.

2.2.2 In summary, the main objectives of the watching brief were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed
- to establish the character of those features in terms of cuts, soil matrices and interfaces
- to record human remains where these are exposed, and to recover this material where preservation *in situ* is not feasible
- to recover artefactual material, especially that useful for dating purposes
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes

2.2.3 Turf and topsoil were removed by mini digger fitted with a ditching bucket, under close archaeological supervision. Archaeological deposits were subsequently cleaned by hand, and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).

2.2.4 All non-modern finds were collected, including those from excavated topsoil. All finds were transferred to the North Pennines Archaeology Ltd. premises at Nenthead for processing. During and after the watching brief, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information. All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC (1990).

2.2.5 Human remains were carefully removed from site, and temporarily transferred to the North Pennines Archaeology Ltd. premises. These were reburied within the former burial ground at Allandale on 25th July 2008.

2.2.6 No palaeoenvironmental material was recovered during the watching brief.

2.3 RAPID DESK-BASED ASSESSMENT

2.3.1 A rapid desk-based assessment was undertaken in order provide relevant background information for the project. This involved consultation of a number of existing sources, in order to achieve and understanding regarding the geographical, topographical, archaeological and historical context of the site.

2.3.2 ***County Record Office (Kendal):*** the County Record Office in Kendal (CROK) was consulted regarding documents specific to the site. However no documentary material relating to the former Quaker Meeting House was held by the record office.

2.3.3 Historic maps of the study area, including surveys, Tithe and Enclosure Maps, and early Ordnance Survey maps, were examined. Several secondary sources, in particular the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, were also consulted.

2.3.4 ***North Pennines Archaeology Ltd (NPA):*** various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any available archives of the sites themselves were examined. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3.5 ***Friends Meeting House, Penrith:*** an enquiry was made to The Society of Friends regarding the former Quaker Meeting House in Shap, and a visit was made to the Friends Meeting House in Penrith, where a number of historical documents relating to the local Quaker movement are held. No known plan exists of the former Quaker Meeting House in Shap.

2.4 PROJECT ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991). The archive will be deposited within an appropriate repository, and a copy of the report deposited at the County Historic Environment Record at Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, QMH-A, CP734/08.

2.4.2 North Pennines Archaeology and Cumbria County Council Historic Environment Service support the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION

3.1.1 Allandale is located on the west side of Main Street (A6), in the centre of Shap village, Cumbria (Figure 1). Shap lies in the Eden Valley, mid way between the towns of Penrith and Kendal, close to the modern M6 motorway. The village lies just outside, and to the east of the Lake District National Park. The site is centred on national grid reference NY 5627 1507.

3.1.2 The archaeological watching brief was undertaken in a garden, to the rear of a modern garage, on the north side of the property (Figure 2). This area was significantly lower than the remainder of the garden to the west, which rose gradually towards the property boundary.

3.1.3 The solid geology of the area comprises Carboniferous limestone with outcrops of Shap granite. This is overlain by glacial deposits of boulder clay (BGS 2001).

3.2 HISTORICAL CONTEXT

3.2.1 The following historical background is intended only as an outline of the known history of the area. It is not within the remit of this project to provide a detailed analysis of the historical context of the site.

3.2.2 *Prehistoric*: significant prehistoric remains survive on the moorlands close to Shap village. These comprise important prehistoric monuments, such as stone circles, and the Shap stone alignment, which have been largely destroyed by agricultural practices in the 18th and 19th centuries.

3.2.3 *Roman*: in contrast to the wealth of prehistoric sites, the Roman archaeology is largely confined to isolated findspots, and it would appear that the area was marginal at this time. A number of Romano-British enclosed settlement sites survive from this period, which appear to cluster in the vicinity of the Wicker Street Roman road, which runs to the east of Shap, linking Low Borrow Bridge and Kirkby Thore. The dating of these sites is problematic, and many of them have their origins in the later prehistoric period.

3.2.4 *Medieval*: the early medieval evidence is almost entirely typified by place name survival; settlements such as Rosgill indicate, for example, Viking activity in the area. An excavation in Shap village did recover evidence of a 'Dark Age' hall, though most other sites are confined to findspots. This building is thought to date to the 7th or 8th centuries, as three loom weights dating to that period were found in an adjacent pit (LUAU 2000).

3.2.5 Shap village has origins in the medieval period, with the village focus at the northern end of the present settlement. St Michaels Church in Shap is believed to predate the nearby Abbey, as it apparently remained rectorial until the Abbey appropriated it in 1170, after which it became a vicarage (Bulmer 1885, 364).

3.2.6 The Shap area came under the aegis of Shap Abbey, situated 1km to the west of the village, and the bulk of the later medieval remains are predominantly agricultural in character, this area being integral to the economy of the abbey. Although there is considerable documentary evidence for granges, the grange sites were sited on the better land and have inevitably been the focus for subsequent land improvement, which has reduced the survival of medieval remains.

3.2.7 The later medieval activity has survived best within the immediate environs of Shap village, the present day field systems having fossilised the form and character of the earlier medieval fields, as narrow fields extending out from the village, though the boundary markers themselves are of a later date. To the east of the village, the area was moorland until the 19th century, and the enclosed moorland areas have consequently seen the most intensive agricultural practice, which has therefore meant little pre-medieval survival.

3.2.8 *Post-medieval*: in 1821, 960 people lived in the Shap Parish, about 600 living in Shap itself (Parson and White 1829, 600). It was described by Parson and White (ibid, 601) as a "*long town, of detached houses, extending northward from Brackenber about one mile, along the great high-road between Penrith and Kendal*". In 1858, Shap is described as a decayed market town of detached houses (Kelly, 1858, 61). Brackenber had by then become the southern part of the village, rather than being separated by one mile.

3.2.9 The landscape around Shap is dominated by evidence for post-medieval agriculture, the area having been enclosed following an Inclosure Act dated 1813, with the subsequent award being granted in 1820 (Cumbria Record Office Kendal, Ref. WQR/I 81). The surviving evidence includes the ubiquitous drystone field boundaries, field barns and sheepfolds or bothies.

3.2.10 A granite works was established close to Shap in the 1860s, with a slate works being a much older industry, for use in pencils (Bulmer 1885). The granite works was the main employer in 1885, employing about 300 men, and was the most important industry in Shap at that time.

3.2.11 *The Quakers:* the non-conformist Quaker movement was introduced in the Eden Valley in 1652. The Quaker Meeting House in Shap was established in 1704, to serve as a meeting place for the local Quaker community; prior to this Friends met on an open hillside near the village. A piece of land, east of the Main Street and west of the Back Lane, was offered for a meeting house and burial ground by John Airey in 1703 (Butler 1999, 669). The house was constructed as a single room for 50-60 people, and was maintained until its closure in 1778, due to falling numbers. In 1802 the Shap Meeting House and burial ground were sold for £31, the proceeds going to the meeting house in Moorland (Butler 1999, 670).

3.2.12 The simplicity and plainness of the Quaker lifestyle were to a large extent reflected in burial. Quaker burial grounds were outside the limits of the local Parish church, and often set within a simple walled enclosure (not always attached to a Meeting House). No headstones were used before 1850, and after this date only very simple grave markers were used. Burials were often closely spaced, and it was not unusual for human remains to be moved to make space for later burials, with bones being placed within a simple ossuary. The alignment of the graves was not considered

important, and these would be arranged to suit the layout of the burial ground. When a burial ground was no longer needed, they were disposed of with little ceremony, apart from restrictions on deep digging, as there was very little veneration of burial places within the Quaker movement (*pers com* David Butler).

3.2.13 The 1st Edition Ordnance Survey map of 1863 illustrates the site of the former Quaker Meeting House, situated on the west side of the Main Street, and east of the Back Lane, within a small rectangular enclosure (Plate 1). The building is labelled as a post office, and a Grammar School was located to the north. A well is illustrated on the north side of the property.

3.2.14 The 2nd Edition Ordnance Survey map of 1899 indicates that the land either side of the former Quaker Meeting House was gradually subdivided, and another school was built immediately to the north.

3.2.15 *Modern*: the former Quaker Meeting House was rebuilt and altered to form the present dwelling, known as Allandale, and the former burial ground is now a garden. The existing garage was added to the north side of the property in the 1990's.

3.2.16 Modern housing estates have been constructed to the southeast and to the north of the property. A memorial park and football ground are now situated to the east.

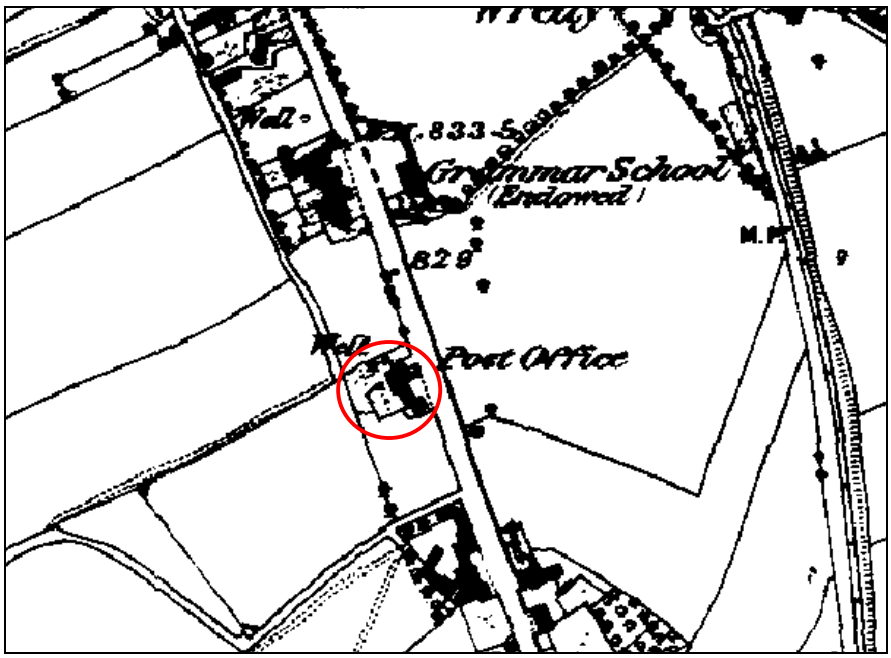

Plate 1 Extract from the 1st Edition Ordnance Survey map of 1863, showing the site of the former Quaker Meeting House in Shap (in red)

4 ARCHAEOLOGICAL WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 The watching brief was undertaken at the rear of Allandale (Plate 2), during the excavation of foundation trenches for an extension to the existing garage. This was situated in the back garden, immediately to the north of the house (Plate 3).

4.1.2 Human remains relating to at least three burials had been revealed at the site prior to the start of the archaeological watching brief. In addition to these, two near-complete skeletons and parts of a further three burials were revealed during the course of the archaeological monitoring, making eight skeletons in total.

Plate 2 Allandale, the site of the former Quaker Meeting House, Shap (looking southwest)

Plate 3 Garden to the rear of Allandale, and location of the former Quaker burial ground (looking east). The garage, and the site of the archaeological watching brief, is on the left

4.2 RESULTS

4.2.1 The excavation of Trench A, the foundation for the retaining wall of the garden, had already been completed at the start of the Watching Brief. Topsoil (100) was removed by minidigger, down to the natural limestone (101). This had revealed the partial remains of two human skeletons. Skeleton 1 was in the section at the south end of the trench aligned east-west, and Skeleton 2 was recovered from a pit towards the north end of the trench (Figure 2).

4.2.2 Skeleton 1 was only partially exposed in the extreme south end of the trench, extending outside the trench both to the south and the east. The skull, exposed in the south facing section, appeared to be complete. Other bones visible in the south facing section and exposed in the trench were a number of both ribs and vertebrae. More bones were visible in the east facing section and appeared to have been aligned next to the vertebrae, not in an articulated position. The skull, ribs, vertebrae and other remains exposed by the excavation were carefully removed by extending the excavation area to release them. There was no evidence of a grave cut.

4.2.3 Skeleton 2 was discovered when the digger bucket removed the skull from the top of the charnel pit, that the remains had previously been deposited in. All other bones were removed from the pit. None were articulated and it was not clear at this point whether all elements were present. The rectilinear cut for the pit [102] was clearly visible, and was filled by dark brown sandy loam (103) containing fragments of human bone.

4.2.4 The excavation of Trench C, the foundation for the extension to the present dwelling, had already been completed at the start of the Watching Brief. This had revealed the top portion of a skull, Skeleton 7, in section at the south-east inner edge of the return of the trench. The skull was removed and was found to be almost intact, along with the lower jaw and teeth. Vertebrae were detected further in the section but these were left undisturbed as per English Heritage guidelines (2005).

4.2.5 The monitoring of the excavation of Trench B occurred between the 30th June and the 1st July, when all excavation work was completed. This revealed the remains of a further five individuals. Towards the north end of the trench section running north-south, several bones were exposed in the section and labelled Skeleton 8. A small area of the section was extended so as to wholly remove the exposed elements of bone.

4.2.6 Approximately in the middle of the north-south section of Trench B, a skull was exposed in the west facing section of the trench labelled as Skeleton 3. Only the top half of the skull was seen and the section was extended to remove the skull and some of the cervical vertebrae.

4.2.7 About 1 metre in from the south/east return of Trench B several elements of another skeleton, Skeleton 4, were observed. Large portions of the skull were present as well as upper limb bones, ribs and vertebrae. The section was again extended so as to remove the bones that were exposed in it. Some of the remains appeared to be in a disarticulated position but this may have occurred during the excavation.

4.2.8 Skeleton 5 was positioned almost at the southern extent of Trench B. Both femurs, tibias and fibulas were exposed and some of the right foot bones could be seen. The upper body elements and upper ends of the femurs ran under the section between Trenches A and B. Some of the remains of the feet ran under the section at the eastern end of the return. The grave cut [104] was clearly visible, but this could only be defined at the eastern (foot) end of the remains. The cut was filled by dark brown sandy loam (105). The sections were again extended to release the elements that extended into them and all bones were removed. The position of the skull for Skeleton 5, as the rest of the skeleton appeared to be articulated, should have been in Trench A. However, no Skull fragments or vertebrae were recovered from the corresponding area.

4.2.9 Where Trench B met the southwest corner of the existing garage another skeleton was exposed, Skeleton 6. This looked almost complete and articulated except that some of the foot bones were under the section of the garage drain at the eastern most end of the trench.

4.2.10 All elements of the human bones were carefully removed from their original positions and placed in boxes. They were then taken to North Pennines Archaeology base at Nenthead for assessment and investigation. The assessment appears in Section 5, below.

4.3 DISCUSSION

4.3.1 When North Pennines Archaeology were called in to do the watching brief at Allandale, Shap, several skeletal elements had already been uncovered and one skull from Skeleton 2 had been removed but placed on the surface of the excavated trench. The bones of this skeleton were recovered from a charnel pit, and had clearly been moved from their original location.

4.3.2 All the other skeletons recovered were still in the section of the trenches from which they were recovered. Skeletons 1, 3, 4, 5 6 and 7 were all aligned in an east-west direction, as with Christian burials. The only evidence of a grave cut was in Skeleton 5 where a partial cut could be seen around the feet and lower limbs. It is not known why only a partial cut is apparent.

4.3.3 There was no evidence of any coffin associated with any of the skeletons, but a few clasps or studs were found with some of the skeletons very close to the remains. This suggests a shroud not a coffin was used in the burials. These objects were highly corroded and are not easily identifiable without X-ray analysis.

5 THE HUMAN BONE

5.1 INTRODUCTION

5.1.1 This section details the macroscopic assessment of eight skeletons recovered from the site by North Pennines Archaeology Ltd. The remains were recorded following the Guidelines to the Standards for Recording Human Remains (Brickley and McKinley 2004). A complete list of bones present for each skeleton is included in Appendix 2.

5.1.2 Preservation of the remains was generally good although post mortem breakage had occurred on many of the bones. Skeletons 4 and 5 did show poorer surface preservation, and skeleton seven was highly fragmented.

5.2 METHODS

5.2.1 The assessment of the human skeletal remains was done macroscopically and the protocol for the compilation of a skeletal inventory for articulated bone was followed (Brickley 2004, 6-7).

5.2.2 The bones were identified by anatomical element, and when appropriate side. Due to the ribs being highly fragmented, side could only be assigned when the heads and necks were present. Inventories for all the skeletons were filled in, and will be contained within the site archive. Notes on age and sex were made where appropriate and in the presence of intact long bones, estimates of stature were also carried out. Non-metric traits and pathologies were recorded if they were present, and the interpretation of these will be outlined in the discussion of each skeleton.

5.3 DISCUSSION

5.3.1 ***Skeleton 1***: this skeleton was in a very fragmented state, but was given grade 0 for the general surface preservation of the bone (McKinley 2004, 14-17). The elements that were present comprised of parts of the skull, cervical and thoracic vertebrae, clavicles, ribs and left humerus. Some small scapula fragments were also present but they were so fragmented that a side was not assigned. The mandible was present but had no teeth and all the tooth sockets were completely closed showing that this individual had no lower teeth. Sockets were present in the maxilla but as none of the teeth were present tooth wear analysis could not be carried out as a way to determine the age of this individual (Brothwell 1981).

5.3.2 The gender of this individual was identified as being male due to the skull showing signs of a pronounced brow ridge, nuchal crest, mastoid processes and mental eminence as well as having rounded supraorbital ridges.

5.3.3 All the cervical vertebrae showed signs of new bone growth around the margins of the vertebral bodies (marginal osteophytes) showing that this individual suffered from joint disease in the spine, specifically spinal osteophytosis (Roberts and Manchester 2005).

5.3.4 ***Skeleton 2***: as well as those elements already listed in the inventory this skeleton had other small fragments that due to their size could not be assigned a side. This includes an ilium fragment, a foot phalanx, 5 small rib fragments and 2 fragmentary cervical vertebrae. Again preservation was given grade 0 (McKinley 2004, 14-17).

5.3.5 As with skeleton 1 the cranial morphology identified this individual as male as well as the right pelvis showing a smaller v-shaped sciatic notch. The presence of a complete femur meant that the height of this individual was found to be approximately 175.59cm (Trotter 1970).

5.3.6 Age was estimated using two methods. Cranial suture closure estimated the age as 51.5 ± 10.5 years (Meindl and Lovejoy 1985). Tooth wear analysis estimated age as being between 33-45 (Brothwell 1981).

5.3.7 Spinal Osteophytosis was also present in this individual. The growth of marginal osteophytes was so extensive in the lumbar vertebrae that they had actually fused together. This would make movement in this part of the spine very restricted and painful for the individual (Roberts and Manchester 2005).

5.3.8 ***Skeleton 3***: very little of this individual was recovered. Only skull fragments and C-1 to C-4 were present. Preservation was given grade 0 (McKinley 2004, 14-17).

5.3.9 Enough of the skull remained to identify this individual as being male (large nuchal crest, mastoids and mental eminence). There were enough of the teeth present to carry out tooth wear analysis. This gave an age estimate of 33-45 (Brothwell 1981).

5.3.10 Dental disease was identified due to the presence of sub-gingival calculus on all the teeth. Dental calculus is basically plaque that has calcified (Freeth 2000).

5.3.11 ***Skeleton 4***: the surface preservation of this skeleton was given grade 2 (McKinley 2004, 14-17). As well as those elements already listed 11 small rib fragments were present. Cranial morphology indicated that this individual was female and the vertical head diameter of the humerus was 38mm, which is within the female range. The length of the right humerus gave a stature of 150.37cm (Trotter 1970).

5.3.12 Age was estimated using two methods. The epiphysis of the medial clavicle was not yet fused, however all other epiphyses were fused, this gives an estimated age of 25 –30 years (McKern and Stewart 1957). Tooth wear analysis gave an age range of 25 –35 (Brothwell 1981).

5.3.13 A small hole was observed on the occipital side of the right lamboidal suture of the skull. It measured 4.95mm in diameter and was surrounded by a small ring of new bone growth. It is possible that there was some trauma to the skull and the skull was still healing when the individual died as there was none of the fracturing present which you would expect to see in a new trauma to the skull. This all suggests that this was an old injury.

5.3.14 Dental calculus (sub-gingival) was present on most of the teeth and no dental caries were present. This individual had a very small upper palate, this led to the 1st incisors and the canines being pushed in front of the 2nd incisors and the 1st premolars. This gave the impression of a double row of teeth at the front of the maxilla.

5.3.15 ***Skeleton 5***: these remains had very poor surface preservation so were given a grade 3 (McKinley 2004 14-17). As well as the vertebrae recorded in the inventory, 5 lumbar, 3 thoracic and 1 cervical vertebral bodies were present but no more information can be provided due to their fragmentary nature. A number of rib fragments were present that could not be sided due to their size.

5.3.16 The right pelvis has a very narrow sciatic notch which suggests the individual was male. The femoral head diameter was measured as 51.01mm and is within male limits (Trotter 1970). Stature was estimated using the right femur and came out at 172.08 cm (Trotter 1970). Age was estimated using the pubic symphyseal surface and was given phase 4. This estimates age at 35.2 ± 9.4 years (Brooks and Suchey 1990).

5.3.17 The right ilium shows signs of new bone growth at the sacro-iliac joint. A common joint disease in this area is ankylosing spondylitis (AS) so it is possible that the bone growth is the start of this condition presenting itself in the case of this individual (Rodgers, 2000).

5.3.18 The diaphysis of the left 5th metacarpal appears to have a healed fracture. No evidence of the fracture remains. However, the diaphysis is twisted suggesting it has been broken at some point.

5.3.19 ***Skeleton 6***: the preservation of this skeleton was very good and has been given grade 0 (McKinley 2004 14-17). As well as the ribs recorded in the inventory an additional 22 small fragments were present along with 8 small parietal fragments. The cranial and pelvic morphology proves that this individual was male. Stature was estimated using the left femur length and was found to be 170.83cm (Trotter 1970).

5.3.20 Three methods were used to age this individual. Cranial suture closure gave an age of 48.8 ± 10.5 years (Meindl and Lovejoy 1985). The pubic symphyseal surface was placed at phase 5 giving an age of 45.6 ± 10.4 (Brooks and Suchey 1990). The auricular surface was placed at phase 6 giving an age range of 45-49 (Lovejoy *et al* 1985b).

5.3.21 This individual appears to have had very severe dental disease. Tooth wear is very severe and in the cases of some teeth (left upper 2nd incisor, upper right premolars, lower left 3rd molar) only the roots remain as the whole crown has been worn away. No lower teeth were present and the majority of the molar sockets appeared to be closed fully showing that the teeth had been absent during the life of this individual. Dental calculus was present on the upper left 3rd molar. Dental caries were present and the base of the crown on the upper left 1st premolar. Periodontal disease was observed due to the presence of severe alveolar resorption, the whole roots of the upper incisors were exposed as a result of this (Brooks and Suchey 1990).

5.3.22 ***Skeleton 7***: this skeleton was extremely fragmented. As well as the elements already recorded, a fragmentary cervical vertebral body was also present. The cranial morphology suggests that this individual is a male. Due to the absence of any long bones stature could not be estimated. Tooth wear analysis gave an age range of 33-45 years for this individual (Brothwell 1981).

5.3.23 ***Skeleton 8***: this skeleton comprised of few skeletal elements. The lower legs and some of the bones of the feet remained as well as parts of the right scapula and hand. No age or gender could be assigned to this individual and no pathologies were present on these bones.

6 CONCLUSIONS

6.1 CONCLUSIONS

6.1.1 The archaeological monitoring at Allandale has allowed a unique opportunity to investigate the remains an 18th century rural Quaker burial ground, in used between 1704 and 1778. No unexpected features were exposed during the monitoring; the burials being consistent with the beliefs and practices of the non-conformist Quaker community. The graves were unmarked, and the shrouded bodies were placed in simple graves, aligned approximately east-west, apparently without coffins. An example of a simple charnel pit was also revealed. These were not uncommon, as space within Quaker burial grounds was often very limited.

6.1.2 The assemblage of eight skeletons comprised six males, who were between 33 and 51 years old, one female between 25 and 35 years of age, and one individual who cannot be assigned a gender or age. Dental disease seems to be the most prevalent pathology amongst these individuals, with dental calculus present on nearly every tooth. Joint disease seems to be second to this as would be expected from a collection that contains older individuals.

6.1.3 The human remains have been reburied within the boundary of the original burial ground. Given the evidence for human remains at the site, it is recommended that any future excavation work at the site should be subject to archaeological monitoring by an experienced archaeological osteologist.

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APPENDIX 1: FIGURES

APPENDIX 2: SKELETAL INVENTORY

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 1

Bone	Right	Left	Bone	
Parietal	√	√	Frontal	
Temporal	√	√	Occipital	√
Maxilla	√	√	Sphenoid	
Nasal			Vomer	
Zygomatic	√		Ethmoid	
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible	√	√	Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum				
Coccyx				
Sacrum				

Right ribs 12 **Left ribs** 8

Vertebrae	
C1	√
C2	√
C3	√
C4	√
C5	√
C6	√
C7	√
T1	√
T2	√
T3	√
T4	√
T5	√
T6	√
T7	√
T8	√
T9	√
T10	
T11	
T12	
L1	
L2	
L3	
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus	√		√	√	√
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle	√			
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle	√			
Patella				

Right	1	2	3	4	5
Metacarpals					
Metatarsals					

Left	1	2	3	4	5
Metacarpals					
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right									
Left									

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right									
Left									

Hand	Proximal phalanges		Middle phalanges		Distal phalanges	
Foot	Proximal phalanges		Middle phalanges		Distal phalanges	

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 2

Bone	Right	Left	Bone	
Parietal	√	√	Frontal	√
Temporal	√	√	Occipital	√
Maxilla	√	√	Sphenoid	√
Nasal	√	√	Vomer	√
Zygomatic	√	√	Ethmoid	√
Lacrimal	√	√	Hyoid	
Palatine	√	√	Cricoid	
Mandible			Thyroid	
Orbit	√	√		

Bone	>75 %	50-75%	25-50%	<25%
Sternum		√		
Coccyx				
Sacrum				√

Right ribs 4 **Left ribs** 2

Vertebrae	
C1	
C2	
C3	
C4	
C5	
C6	
C7	
T1	
T2	
T3	
T4	
T5	
T6	
T7	
T8	√
T9	
T10	
T11	
T12	
L1	√
L2	√
L3	√
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus			√	√	√
Radius					
Ulna					
Femur					
Tibia	√	√	√	√	√
Fibula					

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus			√	√	√
Radius					
Ulna					
Femur					
Tibia					
Fibula		√	√	√	√

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium			√	
Ischium	√			
Pubis				
Scapula				
Clavicle				
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Right	1	2	3	4	5
Metacarpals					
Metatarsals					

Left	1	2	3	4	5
Metacarpals			√		
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right									
Left									

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right									
Left									

Hand	Proximal phalanges		Middle phalanges		Distal phalanges	
Foot	Proximal phalanges		Middle phalanges		Distal phalanges	

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 3

Bone	Right	Left	Bone	
Parietal	√	√	Frontal	
Temporal	√	√	Occipital	√
Maxilla	√	√	Sphenoid	
Nasal			Vomer	
Zygomatic	√	√	Ethmoid	
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible	√	√	Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum				
Coccyx				
Sacrum				

Right ribs | **Left ribs**

Vertebrae	
C1	√
C2	√
C3	√
C4	√
C5	
C6	
C7	
T1	
T2	
T3	
T4	
T5	
T6	
T7	
T8	
T9	
T10	
T11	
T12	
L1	
L2	
L3	
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Right	1	2	3	4	5
Metacarpals					
Metatarsals					

Left	1	2	3	4	5
Metacarpals					
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right									
Left									

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right									
Left									

Hand	Proximal phalanges		Middle phalanges		Distal phalanges	
Foot	Proximal phalanges		Middle phalanges		Distal phalanges	

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 4

Bone	Right	Left	Bone	
Parietal	√	√	Frontal	
Temporal	√	√	Occipital	√
Maxilla	√	√	Sphenoid	
Nasal			Vomer	
Zygomatic			Ethmoid	
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible	√	√	Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum	√			
Coccyx				
Sacrum				

Right ribs 11 **Left ribs** 9

Vertebrae	
C1	√
C2	√
C3	√
C4	√
C5	√
C6	√
C7	√
T1	√
T2	√
T3	√
T4	√
T5	√
T6	√
T7	√
T8	√
T9	√
T10	
T11	
T12	
L1	
L2	
L3	
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus	√	√	√	√	√
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus	√	√	√	√	√
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium				
Ischium				
Pubis				
Scapula	√			
Clavicle	√			
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				√
Clavicle	√			
Patella				

Right	1	2	3	4	5
Metacarpals				√	
Metatarsals					

Left	1	2	3	4	5
Metacarpals					
Metatarsals			√	√	

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right									
Left									

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right									
Left									

Hand	Proximal phalanges	1	Middle phalanges		Distal phalanges
Foot	Proximal phalanges		Middle phalanges		Distal phalanges

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 5

Bone	Right	Left	Bone	
Parietal			Frontal	
Temporal			Occipital	
Maxilla			Sphenoid	
Nasal			Vomer	
Zygomatic			Ethmoid	
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible			Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum				√
Coccyx				
Sacrum			√	

Right ribs 1 **Left ribs** 4

Vertebrae	
C1	
C2	
C3	
C4	
C5	
C6	
C7	
T1	
T2	√
T3	√
T4	√
T5	√
T6	
T7	
T8	
T9	
T10	
T11	
T12	
L1	
L2	
L3	
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus				√	√
Radius	√	√	√	√	√
Ulna					
Femur	√	√	√	√	√
Tibia	√	√	√	√	√
Fibula	√	√	√	√	√

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus	√	√	√	√	√
Radius				√	√
Ulna					
Femur	√	√	√	√	√
Tibia					
Fibula	√	√	√	√	√

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Right	1	2	3	4	5
Metacarpa	√	√	√	√	√
Metatarsals	√	√	√	√	√

Left	1	2	3	4	5
Metacarp	√	√	√	√	√
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right	√	√	√	√	√	√		√	
Left	√				√				

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right	√	√	√	√		√	√		
Left	√	√							

Hand	Proximal phalanges	2	Middle phalanges		Distal phalanges	
Foot	Proximal phalanges	8	Middle phalanges	4	Distal phalanges	2

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 6

Bone	Right	Left	Bone	
Parietal	√	√	Frontal	√
Temporal	√	√	Occipital	√
Maxilla	√	√	Sphenoid	
Nasal			Vomer	
Zygomatic	√	√	Ethmoid	√
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible	√	√	Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum				√
Coccyx				
Sacrum	√			

Right ribs 12 **Left ribs** 8

Vertebrae	
C1	√
C2	√
C3	√
C4	√
C5	√
C6	√
C7	√
T1	√
T2	√
T3	√
T4	√
T5	√
T6	√
T7	√
T8	√
T9	√
T10	√
T11	√
T12	√
L1	√
L2	√
L3	√
L4	√
L5	√

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus	√	√	√	√	√
Radius	√	√	√	√	√
Ulna	√	√	√	√	√
Femur	√	√	√	√	√
Tibia	√	√	√	√	√
Fibula	√	√	√	√	

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus	√	√	√	√	√
Radius	√	√	√	√	√
Ulna	√	√	√	√	√
Femur	√	√	√	√	√
Tibia					
Fibula					

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium	√			
Ischium	√			
Pubis	√			
Scapula				√
Clavicle				
Patella	√	√	√	√

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium	√			
Ischium	√			
Pubis	√			
Scapula				
Clavicle				
Patella	√	√	√	√

Right	1	2	3	4	5
Metacarpa	√	√	√	√	√
Metatarsals					

Left	1	2	3	4	5
Metacarp	√	√	√	√	√
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right						√	√	√	
Left		√	√				√	√	

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right									
Left									

Hand	Proximal phalanges	10	Middle phalanges	6	Distal phalanges	5
Foot	Proximal phalanges		Middle phalanges		Distal phalanges	

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 7

Bone	Right	Left	Bone	
Parietal		√	Frontal	√
Temporal	√	√	Occipital	√
Maxilla		√	Sphenoid	
Nasal			Vomer	√
Zygomatic		√	Ethmoid	
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible	√half	√	Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum				
Coccyx				
Sacrum				

Right ribs | **Left ribs**

Vertebrae	
C1	√
C2	√
C3	
C4	
C5	
C6	
C7	
T1	
T2	
T3	
T4	
T5	
T6	
T7	
T8	
T9	
T10	
T11	
T12	
L1	
L2	
L3	
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia					
Fibula					

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Right	1	2	3	4	5
Metacarpals					
Metatarsals					

Left	1	2	3	4	5
Metacarpals					
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right									
Left									

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right									
Left									

Hand	Proximal phalanges		Middle phalanges		Distal phalanges	
Foot	Proximal phalanges		Middle phalanges		Distal phalanges	

HUMAN REMAINS RECORDING FORM: Adult Skeletal Inventory

Skeleton number: 8

Bone	Right	Left	Bone	
Parietal			Frontal	
Temporal			Occipital	
Maxilla			Sphenoid	
Nasal			Vomer	
Zygomatic			Ethmoid	
Lacrimal			Hyoid	
Palatine			Cricoid	
Mandible			Thyroid	
Orbit				

Bone	>75 %	50-75%	25-50%	<25%
Sternum				
Coccyx				
Sacrum				

Right ribs 3 **Left ribs** 2

Vertebrae	
C1	
C2	
C3	
C4	
C5	
C6	
C7	
T1	
T2	
T3	
T4	
T5	
T6	
T7	
T8	
T9	
T10	
T11	
T12	
L1	
L2	
L3	
L4	
L5	

Right

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia		√	√	√	
Fibula		√	√	√	√

Left

Bone	Prox JS	P 1/3	M 1/3	D 1/3	Dist JS
Humerus					
Radius					
Ulna					
Femur					
Tibia		√	√	√	√
Fibula			√	√	√

Right

Bone	>75 %	50-75%	25- 50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				√
Clavicle				
Patella				

Left

Bone	>75 %	50-75%	25-50%	<25%
Ilium				
Ischium				
Pubis				
Scapula				
Clavicle				
Patella				

Right	1	2	3	4	5
Metacarpals		√			
Metatarsals	√	√	√		

Left	1	2	3	4	5
Metacarpals					
Metatarsals					

	Scaphoid	Lunate	Triquetral	Pisiform	Trapezium	Trapezoid	Capitate	Hamate	Sesmoid
Right		√							
Left									

	Talus	Calcaneus	1st Cun	2nd Cun	3rd Cun	Navicular	Cuboid		Sesmoid
Right	√	√				√			
Left	√	√							

Hand	Proximal phalanges	1	Middle phalanges		Distal phalanges	
Foot	Proximal phalanges	1	Middle phalanges	1	Distal phalanges	