



EVALUATION OF AN EARTHWORK AT NORHAM CASTLE, NORTHUMBERLAND

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The Norham Castle linear earthwork evaluation was undertaken during February 2005 as an extension of the Till-Tweed Geoarchaeology Project. The evaluation involved the excavation of a trench across an upstanding earthen bank which had been tentatively suggested to be of late prehistoric origin, and which might form part of a large 'hillfort' (Pearson 2002), based on its morphology and relationship with the medieval castle defences. The trench revealed the stratigraphy of the bank's construction to comprise a series of dumps of clay and stone capping, although no features were found set or cut into the crest of the bank. It was not possible to obtain dating samples from any underlying land surface as the bank was built onto natural boulder clay after prior removal of the topsoil. The only small finds came from the topsoil and were undiagnostic, with the exception of a small fragment of medieval green-glazed pottery. A thin branch of wood was recovered from the primary dump of the bank's construction layer and this sample returned a radiocarbon date of c. cal AD 1690-1920 at 95.4% confidence. The radiocarbon date provides a terminus post quem for the construction of the bank, placing it within the post-medieval to modern period, indicating that it is part of the remodelling of this area on the edge of Norham, possibly as part of the works for a market garden.

INTRODUCTION AND BACKGROUND

This excavation was undertaken as part of the Till-Tweed Geoarchaeology Project, a large-scale research project run jointly by Archaeological Research Services Ltd (ARS Ltd) and Newcastle University investigating the geoarchaeology of the Rivers Till and Tweed in north Northumberland.

The work aimed to test a hypothesis put forward following an English Heritage Survey of Norham Castle and its outworks. It was suggested that an earthwork in the field to the south of the castle may represent the bank of an Iron Age promontory fort (Pearson 2002). If proven to be the case then the findings would have a significant impact not only on our understanding of the Iron Age in this region, but also on the management and conservation of the remains.

The evaluation was undertaken within the grounds of Norham Castle on the south side of the River Tweed in north Northumberland (Fig. 1). The trench was situated across a raised bank in the south-east corner of the field to the south of the road (NT 9075 4733). The feature under investigation com-

prised a large linear bank running parallel to the south-eastern boundary of the field. It has an average height at the apex of 2.5m above the surrounding land surface and is cut back on the eastern face to form a steeper incline than on the west side (Pearson 2002, 19). The east side drops away sharply to a man-made burn that connects with the Mill Burn to the south. The field in which the bank stands is under permanent pasture as are the majority of the earthworks within the boundaries of the Scheduled Monument area.

Norham Castle stands on a spur of land described by the River Tweed to the north-west and by the deeply incised Mill Burn to the south. If this site were a promontory fort then the defensive boundary would be represented by the bank on the eastern side. The site commands views northwards and westwards along the line of the Tweed as well as overlooking a natural crossing point. The site is overlooked by higher ground some 400-500m distant (Pearson 2002, 3).

Norham Castle in its current form is the product of at least six phases of building, repair and refinement (Pearson 2002, 11-14). The original castle, which is

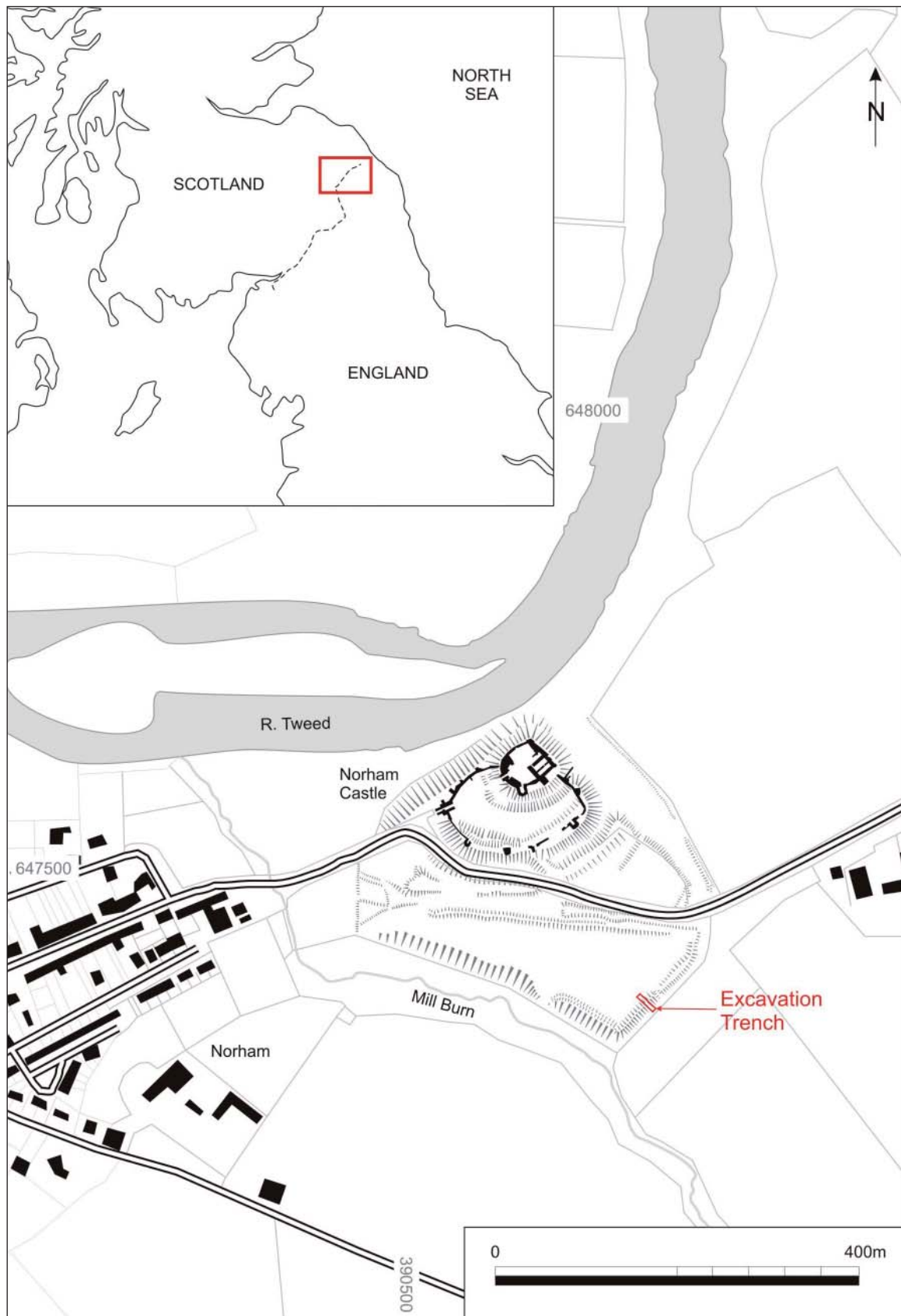


Figure 1 Location of Norham Castle and excavation trench.

represented by the positioning of the main upstanding architectural features still visible, if not the stonework itself, was built around 1121 for Bishop Ranulph Flambard (Lomas 1996, 20). This early fortress was enlarged in the later 12th century, most notably in the area of the keep and inner ward whilst the final phase of what could be termed the 'early construction' was undertaken by King John after he took control of the castle in 1208 (Pearson 2002, 11-12). The following 200 years saw the period of greatest military activity for the castle, during which it earned the reputation as the 'most dangerous place in England' (Fraser and Emsley 1978, 26), and so it is feasible to suggest that there were ongoing repairs undertaken throughout. The 'later construction' began in the early 15th century with the strengthening of the west gate and a further storey being added to the already large central keep. The final period of refinement to the castle, while it was still a functioning military fortress, was undertaken in two stages, around 1495 when the aqueduct was constructed breaching the east curtain wall, and after the heavy bombardment and temporary capture by the Scots in 1513 (Pearson 2002, 12-13). The rebuilding after 1513 saw a significant change in the function of the castle and it is described as becoming 'less a medieval castle and more an early Tudor frontier artillery post' (Saunders 1997, 39). After the cessation of hostilities on the northern border, Norham became defunct as a military installation and was sold into private hands (Pearson 2002, 14), achieving fame in the 19th century as the partial setting of the Walter Scott epic poem, *Marmion* (Fraser and Emsley 1978, 26). Norham was placed under the guardianship of the state in 1923 (Pearson 2002, 14).

The focus of this investigation was the field to the south of the road which has received little attention from previous investigations (Clark 1876; Jeringham 1883; Hunter Blair and Honeyman 1966). There has been a long tradition of the features in this field not being associated with the other medieval features on the site. The Reverend James Raine claimed in his architectural description that the field had contained buildings within living memory (1852, 300), whereas G.T. Clark's architectural description claimed that the visible archaeology represented 'the remains of the Roman Camp and the less regular banks and ditches of some of the besiegers of the castle' (Clark 1876, 309). The current guidebook for Norham Castle interprets the southern field, and the earthworks within, as a further outer bailey associated with the castle which may have been used as a large enclosure for livestock (Saunders 1998, 3 and 20).

Historic surveys of the area to the south of the road do not include the upstanding bank under investigation in this evaluation. In both maps of 1860 and 1897 the path that runs along the northern portion of the bank and cuts through at the later gap in the bank is shown, but not the bank itself.

STRATIGRAPHIC DESCRIPTION (FIG. 2)

The trench was sited so that a 5m wide section of undisturbed bank could be observed, especially along the top of the bank where it was hoped to identify evidence of some form of breastwork. It also allowed the trench to be sited in such a way as to facilitate the cutting of a section through an undisturbed area of bank to observe the stratigraphic sequence and to reveal any surviving pre-bank land surface.

The stratigraphy of the bank comprised a turf and topsoil layer averaging 0.16m in thickness with a few unstratified small finds which represent all artefactual material from the site: seven chipped stone tools along with a fragment of medieval green-glazed pottery. The first archaeological horizon beneath the topsoil comprised a compacted fine-grained grey sandstone which formed a capping layer across the bank. A dump of brown silty clay containing rounded pebbles was mounded against the west side creating the shallow slope. The composition of this clay dump suggests that it may have come from an alluvial/river gravel/clay setting.

Beneath the gravel capping there was a horizon of redeposited boulder clay which in turn overlay the primary bank dump. The primary bank dump consisted of compacted light blue-grey gravel of a very uniform texture and colour suggesting that it was specially collected or quarried from one source. A small branch of wood was discovered protruding from the east end of the section sealed within the primary dump, which represents the first action in the construction of the bank. A radiocarbon determination on this wood returned a date of cal AD 1690-1920 at 95.4% confidence, providing a *terminus post quem* for the construction of the bank within the post-medieval to modern period.

Beneath the primary dump lay a thin horizon of in-situ natural till almost identical in composition to the redeposited clay higher in the construction sequence. In the west end of the trench, beyond the bank, red sandstone bedrock lay directly beneath the topsoil, whereas at the eastern end the natural till substratum sat above a layer of red sandstone regolith.

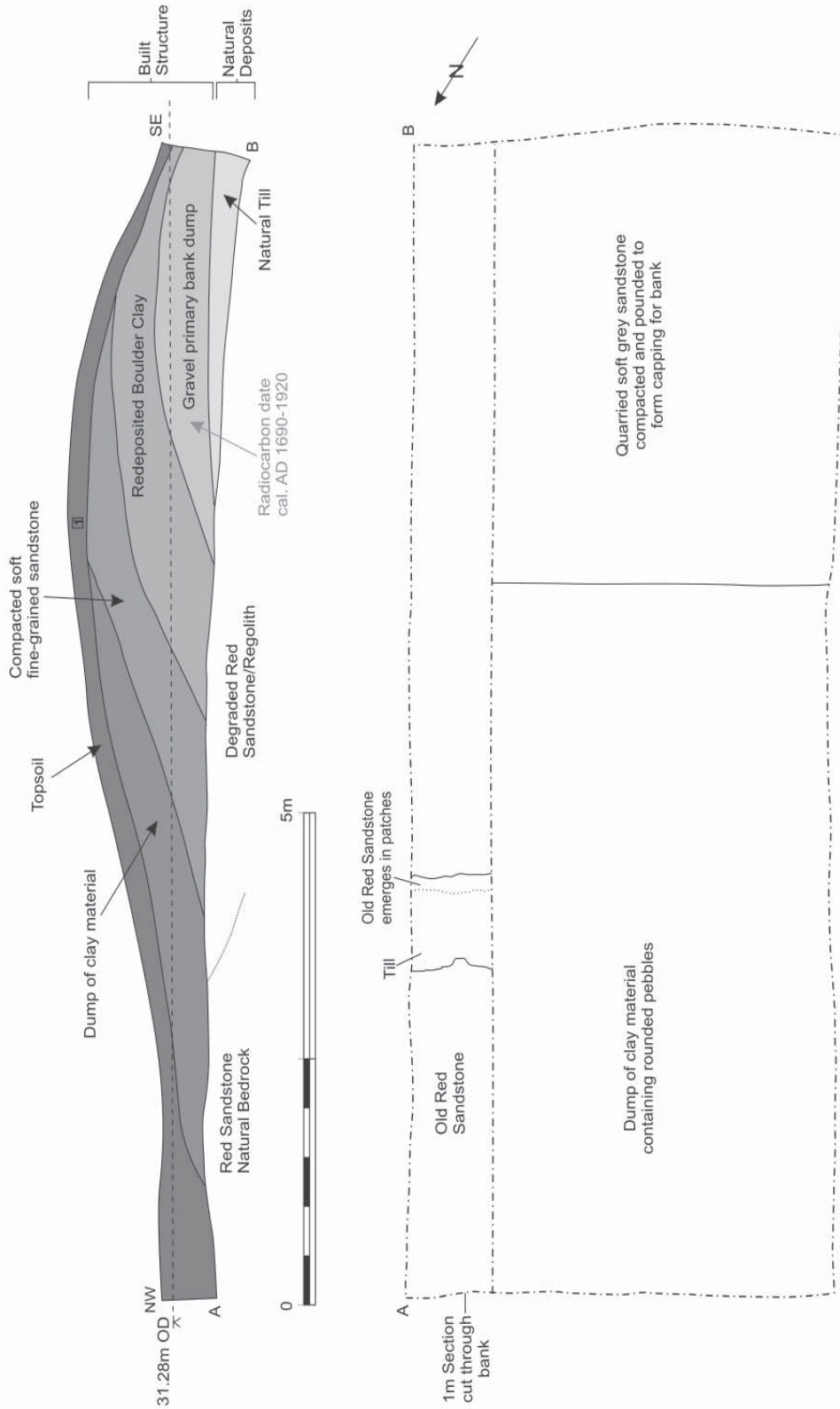


Figure 2 Plan and section of the bank showing constructional sequence.

SPECIALIST ANALYSES

Radiocarbon Dating

Alex Bayliss

A single sample of wood, recovered from the lowest construction deposit of the bank and identified as *castanea* (sweet chestnut), was submitted to English Heritage. A radiocarbon measurement was undertaken by the Scottish Universities Environmental Research Centre (SUERC), returning a date of cal AD 1690-1920 at 95.4% confidence (SUERC-6782) (Table 1).

Small Finds

Clive Waddington

A total of eight small finds were recovered from the excavation, all of which came from the unstratified topsoil. No finds other than the piece of wood were found within the archaeological deposits forming the bank structure. The finds included six pieces of struck flint, one piece of struck chert and a single sherd of medieval green-glazed pottery. Although not very diagnostic the lithics included one parallel-sided blade segment likely to be of later Mesolithic date. No other datable associations were observed.

A small broken sherd of green-glazed pottery with a light grey inner fabric and rough fire-reddened inner surface was recovered from the topsoil. It is a typical find from medieval sites in North-East England and dates to around the 13th century.

Sample	Material	Context	Conventional Radiocarbon Age	$^{13}\text{C}/^{2}\text{C}$ Ratio	Calibrated Age at 2σ 95.4% probability
SUERC 6782	Sweet Chestnut (<i>castanea</i>)	Primary bank dump	1.03 ± 0.005 fM	-28.2 ‰	AD 1690-1920

Table 1 Radiocarbon dating result.

DISCUSSION

The earthwork is extremely well-preserved being made from robust materials and graded to form a substantial, uniform embankment. As the land surface below the bank had been scraped clean of topsoil before the construction of the bank there was little opportunity for preservation of organic material that would allow a *terminus post quem* to be obtained for the bank construction or for the preservation of environmental deposits that could shed light on land-use and vegetation around the site prior to the bank being in use. The deposits that form the bank are derived from the till deposits that mantle this area of landscape. This material must have come from excavated deposits within the immediate vicinity, and raises the possibility that it comprises the upcast or 'clean-out' material from the man-made burn below. The relatively clear delineation between each deposit forming the bank allows for a clear understanding of the construction sequence for this part of the bank. It appears to have been constructed as a single, planned event with no evidence in the investigated section for having been modified throughout its life.

The radiocarbon date of cal AD 1690-1920 reveals that the piece of wood dates to the post-medieval to Victorian period and suggests that this bank was constructed as part of the remodelling of this area of the site, possibly as part of its use as a market garden. The bank's regular form, its lack of evidence for any kind of breastwork, its uniform composition and the C14 date indicates that the bank is a relatively modern feature. The suggestion that the bank could have belonged to a prehistoric hillfort seems no longer valid.

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