

The Tortie Stone Revisited

BLAISE VYNER

The Tortie Stone is one of a growing number of rocks bearing prehistoric decoration known from Cumbria. The site was found as recently as 1987 and excavated soon afterwards. This report outlines the somewhat convoluted history of the stone and details its re-excavation.

THIS report details the re-excavation of the Tortie Stone (Tortie 1) and the examination of an area around a nearby cup-marked stone (Tortie 1a) (Fig. 1), at Tortie, Midgeholme, 2km south east of Hallbankgate, Cumbria (NY 598578), in November 2011. The work was undertaken on behalf of the North Pennines AONB Partnership.

The origins of the markings on the Tortie Stone remain obscure while its later history, eventful though it is, began only in 1987, when Jennifer Waldron noticed a large rock near the track at Tortie, south-east of Hallbankgate (Fig. 1): ‘We moved to Howgill at Christmas 1985. We had no transport and therefore walked everywhere. I noticed the stone very soon after we moved in and was sure it had significance, however, it was not marked on the OS maps. Just over a year later, in 1987, I was walking up the track on a sunny, frosty day. The rime on the stone appeared to have patterns (my eyesight must



FIG. 1. The Tortie Stone from the south-east, October 2011, showing the landscape location.

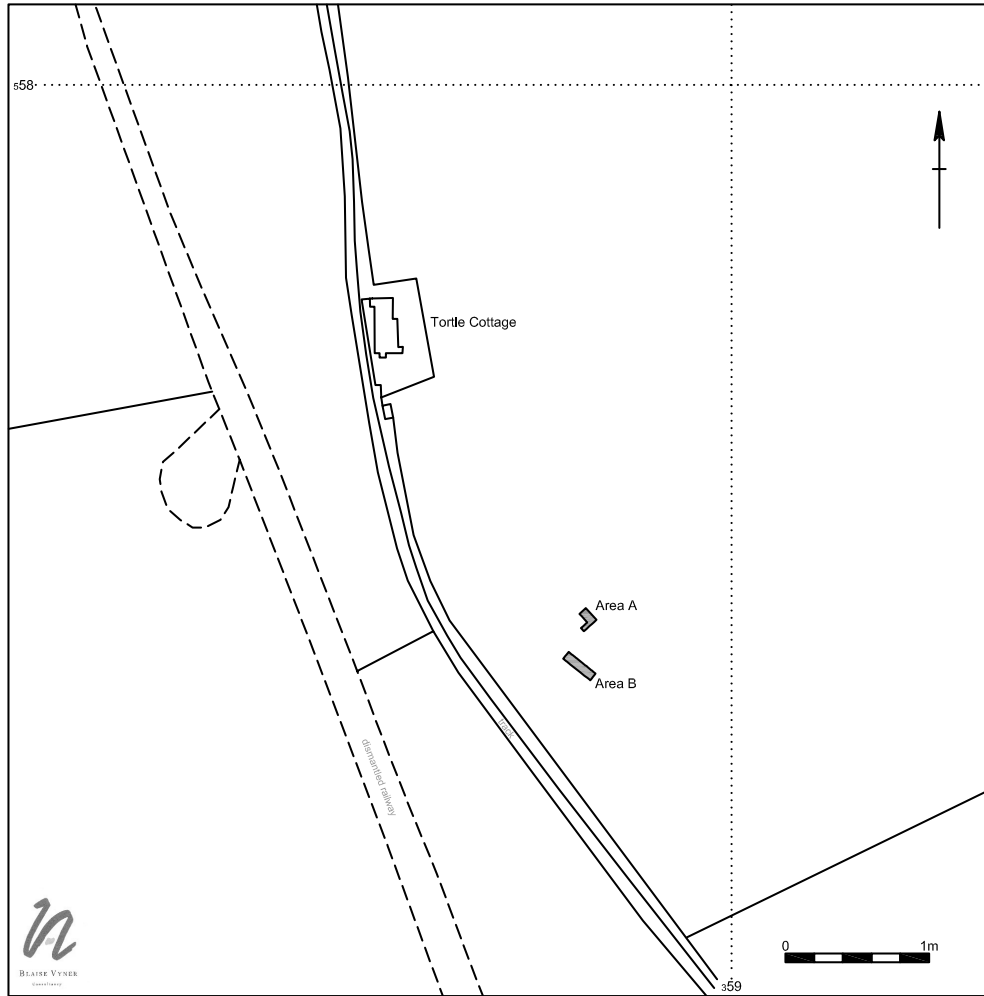


FIG. 2. Location of the Tortie stone.

have been better then), so I climbed over the wall and had a look. As a child I had lived on Bailden/Ilkley moors so I knew what the marks were straight away. I danced around with delight, went back home and phoned Tullie House ...'. (from a note written by Waldron, November 2011).

Following discovery Tortie was coincidentally investigated through both fieldwork and excavation: Paul Frodsham published the decorated stone, together with other recent finds and a gazetteer of Cumbrian rock art (Frodsham 1989). Almost simultaneously Colin Richardson, then at Tullie House Museum, Carlisle, undertook a limited excavation of the site in November 1988 (Richardson 1992). The Tortie Stone, and the nearby decorated block, Tortie 2, had by then been recorded by Beckensall, who published the site in 1992 (Beckensall 1992, 31-33), and included it in the more extensive conspectus which fieldwork later permitted (Beckensall 2002, 47-52). Subsequent discoveries are noted, together with Tortie, in Brown and Brown (2008,

307). When Richardson came to excavate in 1988 he noted a possible cup-mark on a nearby small boulder, and drew attention, too, to a large decorated rock, barely 100m east of the first, described as ‘a large block long favoured as a picnic site by locals’ (Richardson 1992, 10). The original decorated boulder became known as Tortie 1, the nearby small boulder, inexplicably described by both Beckensall and Richardson as ‘a small standing stone’ with its single cupmark became Tortie 1a, and the large block to the west became Tortie 2. Since Tortie 1 is a large boulder, as opposed to the more substantial outcropping block that is Tortie 2, in this narrative Tortie 1 will continue to be referred to as the Tortie Stone.

The Tortie Stone (Tortie 1)

Frodsham’s account of the Tortie Stone was amplified by a wax rubbing done by Beckensall, which revealed more of the decoration (Richardson 1992, Fig. 3). The upper surface of the boulder bears as many as 40 weathered cup-marks, three of which have concentric rings (Brown and Brown 2008, 307). Richardson initially opened an area measuring 3 by 2m around the north end of the boulder (Richardson 1992, 9). He found sandy-yellow subsoil at a depth of around 16cm beneath the turf level. Around its northern end the boulder was surrounded by a deposit of angular stones which were suggested to be the result of field clearance, although Richardson stressed the need to consider the possibility of a cairn of greater antiquity. The excavation area was extended to encompass the boulder on all sides and further small and large stones were revealed on the subsoil surface. Richardson noted what he described as a socket-hole ‘partly obscured by and extending beyond the northern half of the Tortie Stone’ (Richardson 1992, 9). It contained a fill of sandy-yellow and grey soil with



FIG. 3. Detail of decoration on the Tortie Stone, from the south east.

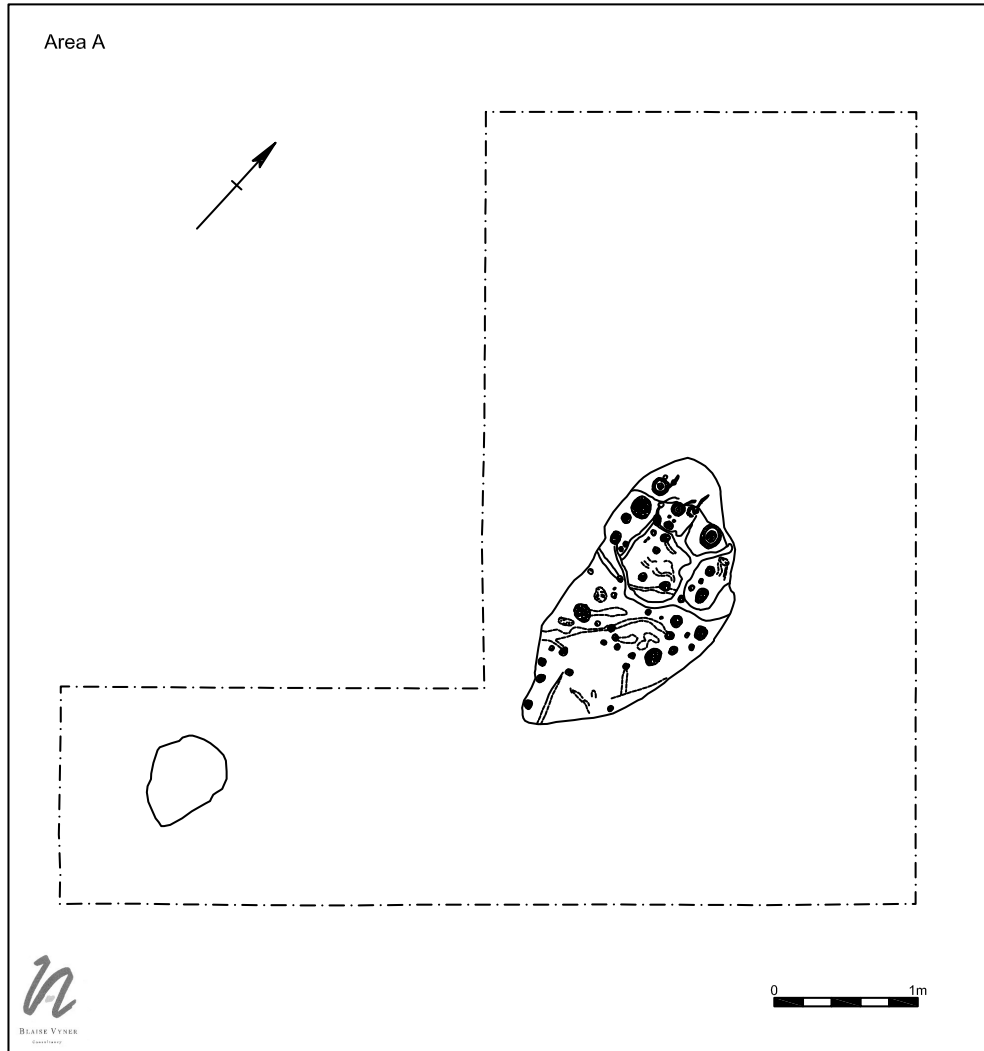


FIG. 4. Plan of Tortie Area A.

small stones and flecks of charcoal. The only finds were two sherds of pottery, one confirmed as medieval. Richardson concluded that the Tortie Stone had once been set up on its decorated northern end, either before or after its decoration (Ibid, 10). The Tortie Stone lies in a field which contains a number of part-sunken boulders which are for the most part fairly small. Five stones are present in the area extending south west from the decorated boulder, among them a small rounded boulder with an apparent worn cup-mark, Tortie 1a, described in passing by Richardson as a 'small standing stone' (Richardson 1992, 7).

Around 2006 a local farmer, for unknown reasons, decided to remove the Tortie Stone. It is anecdotally recounted that a JCB was used to carry the stone away, but that on reaching the field gateway on to the track, north of Tortie Cottage, he was

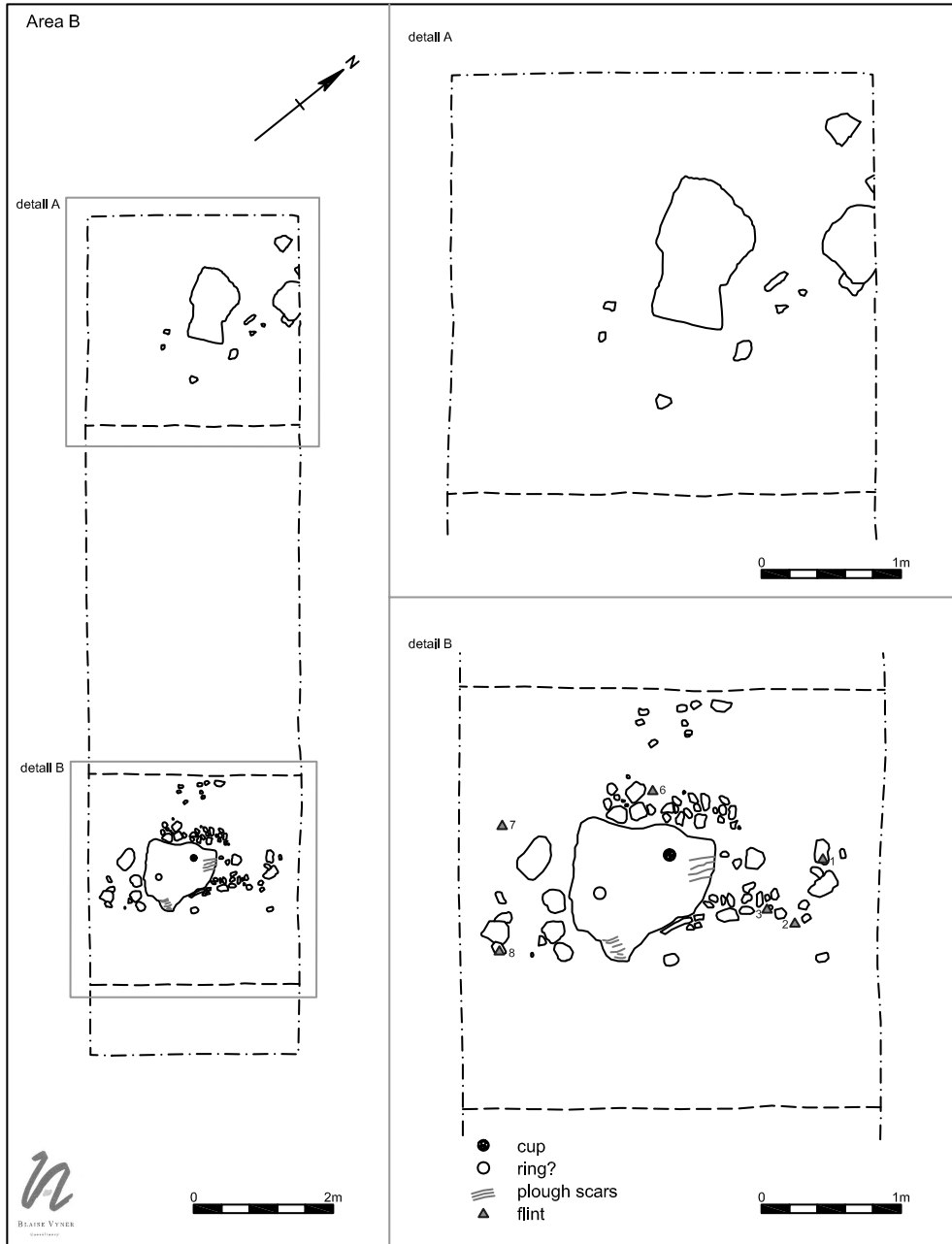


FIG. 5. Plan of Tortie Area B.

persuaded by locals to return the boulder to its original location. It has not been possible to confirm the details of this event, but it should be pointed out that the stone is estimated to weigh almost two tons, which is a heavy lift for a standard JCB, and some other method of movement may have been employed. Comparison of the stone's setting with that shown in a photograph in Richardson's excavation archive indicated

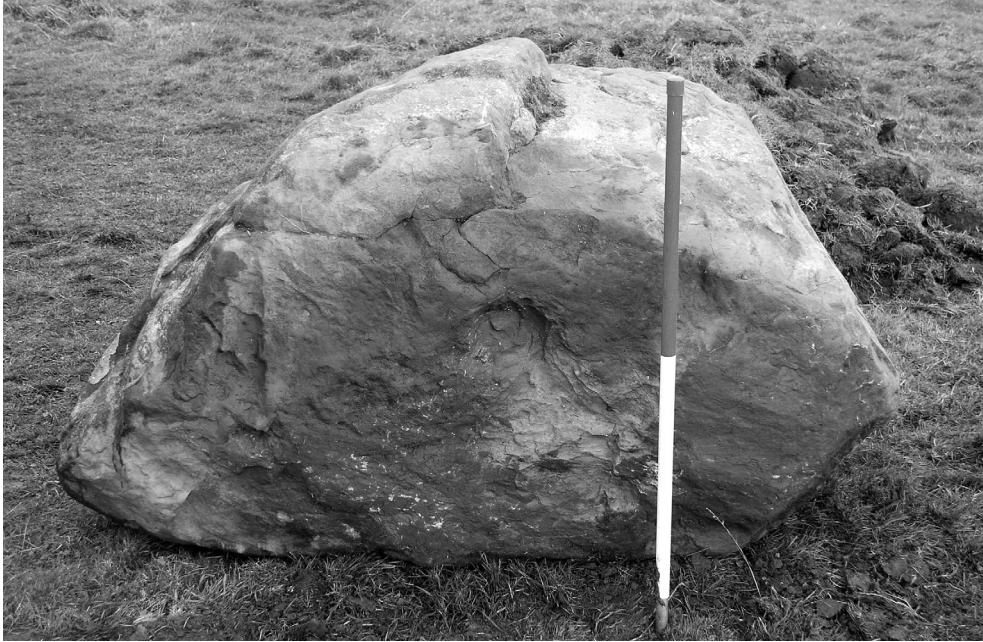


FIG. 6. The underside of the Tortie Stone.

that if it had been placed more or less in its original position, an unprovable suggestion without excavation, the axis of the stone certainly seemed at odds with the evidence of the photograph.

The 2011 excavation was undertaken to address several outstanding issues: had the boulder originally been set on end in a socket, as suggested by Richardson? Was there any relationship between the boulder and the nearby smaller boulders? Were artefacts associated with any of the boulders? Finally, following the impromptu moving of the boulder, how nearly had it been replaced in its original location?

Following initial site photography the Tortie Stone was pulled from its location using a tractor and a set of nylon strops. This enabled the excavation area, 8 by 8m, to be cleared of turf and topsoil (Fig. 4). The location of the stone was meanwhile marked by survey pegs. Cleaning of the subsoil surface revealed a somewhat mixed gravel and pebble subsoil intermixed with yellow-orange clay, at an average depth of around 14cm beneath the turf level. The compact fill of Richardson's backfilled excavation trench contrasted with the softer consistency of the unexcavated subsoil around the trench and immediately beneath the location of the stone, which was much as described by Richardson. Beneath the northern part of the stone the backfilled material remained soft, evidently where it had not been possible to compact it. The disposition of unexcavated subsoil and the excavated area showed that the stone, when moved and returned to the site, had been replaced in more or less its original location. Cleaning of the island of unexcavated subsoil preserved beneath the boulder showed no trace of a socket and it was concluded with some certainty that one had not existed. Finds from the excavated area included a few pieces of modern drainpipe as well as a

sherd of recent pottery. A piece of broken natural flint nodule was recovered from the area to the south of the decorated boulder, while a large flake was found adjacent to the small boulder to the west (flint catalogue 1).

Using the tractor front loader cushioned by a bale of hay the Tortie Stone was nudged on to its side to check whether its underside had ever been decorated. It had not, and the lower surface was uneven and unweathered (Fig. 6). The boulder was then dragged back to its location in the same way that it had been removed. Comparison between the view of the boulder in one of Richardson's excavation photographs with the current view allowed the conclusion that its southern end had been placed slightly to the east of its original position and the opportunity was taken to use the tractor to nudge the stone more nearly to its original axis (Fig. 2).

Tortie 1a

To the south west of the Tortie Stone a trench 12m by 2m was opened so as to encompass the low boulder with eroded cup-mark (Fig. 7) and a second boulder to the north (Fig. 5). In this slightly lower location in the field the topsoil was on average 18cm thick. Excavation was continued to the subsoil surface in two areas each around 3m square around the boulders. No features were present around the northern boulder and no finds were made here. Around the boulder to the south, Tortie 1a, however, a number of flakes of flint were present, together with a barbed-and-tanged arrowhead of Early Bronze Age type, a scraper of Neolithic type and a point of Mesolithic type. In this area the subsoil surface was considerably rougher than elsewhere, with many small stones and gravel pieces present. In order to check for further decoration on the



FIG. 7. Area B, Tortie 1a, showing the simple cup-mark.

boulder, and for any possible stone socket, the tractor was again deployed to lift the stone. This confirmed that the boulder had not been further decorated and that no stone socket was present.

Tortie 2

There is rather less to be said about Tortie 2, a large block of sandstone decorated with simple cupmarks, several associated with vertical trails (Beckensall 2002, pls. 49 and 52). The stone has a remarkably flat top which has no ancient decoration, though it does bear an initial in a nineteenth-century style. The flat top may well be the result of attrition by quarrymen or miners, since the area has seen fairly intense activity associated with coal mining. It is clear that a large chunk has been detached from the eastern end of the stone in relatively recent times, since the surface here is much less eroded than elsewhere, as is the upper surface of the rock, which in its present smooth and level state would provide a suitable surface for card games or similar activities. No excavation has been undertaken around Tortie 2: as noted below, accounts of limited excavations undertaken in the early 2000s by a visiting American refer to activity near Howgill Cottages, some 800m to the south.

The local landscape

While on site the opportunity was taken to do a walk-over survey of the large field in which the Tortie Stone lies. This confirmed the presence of a number of other low earthfast boulders (unmarked) as well as two drainage ditches running downslope north east to south west. Apart from a small quarry located mid-way along the southern boundary of the field, no other significant features were present, although a flint flake was retrieved from a molehill (see below). A log of the locations of these features has been deposited with the archive.

Additional to the walk-over survey attention was drawn to a low standing stone by its discoverer in 1982, Nancy Priest, at NY 599592. A foray by walkover team members beyond the field also identified a small circular earthwork (NY 59276 58292), thought to be the foundations of a round-house of Iron Age type. These features underline the fact that although the remains of the nineteenth- and twentieth-century coal mining are the most obvious features of the landscape here, this area has remained largely unexplored by archaeologists and there remains the strong possibility that other earlier features are present here.

Finds

The topsoil and upper levels of the subsoil in this area contain fragments of coal as well as rounded quartz pebbles. Both are naturally occurring, although locally extensive coal mining may account for some of the coal pieces. Occasional traces of charcoal were reported, but on examination these all turned out to be coal or shale.

Report on the flint by Dr Robert Young

A total of 17 pieces of lithic material was recovered from excavation and field walking around the Tortie Stone.

The raw materials

Fourteen pieces are in various shades of grey flint and one piece is calcined. The site straddles the water-shed between Cumbria and Durham and Northumberland and as a result it is very difficult to pin down the potential source of the raw materials that have been utilized. The predominantly grey flint has been noted at coastal sites in Cumbria and also in County Durham. Either way the material must have been introduced to the site by human activities (see Young 1985, 1-6; 1987, 14; Cherry and Cherry 1987, 69-72).

Technology

Five pieces retain plane butts, one exhibits a cortical butt and one piece has an irregular butt. Three pieces exhibit pronounced bulbs of percussion and two retain diffuse bulbs. This would suggest that both hard hammer and soft hammer percussion techniques are in evidence and that core striking platforms were well prepared before working. Pressure flaking was also in evidence in the finishing of the barbed and tanged arrowhead

Typology

The artefact assemblage can be characterised as follows:

Artefact Type	Number
Microliths	1
Barbed and tanged arrowheads	1
Scrapers	1
Utilised flakes	3
Primary flakes (complete)	0
Primary flakes (broken)	1
Secondary flakes (complete)	1
Secondary flakes (broken)	0
Secondary flakes (calcined and broken)	1
Inner flakes (complete)	4
Inner flakes (broken)	0
Chips	2
TOTAL	15

Microliths

One example of Later Mesolithic rod-like microlith was recovered (Fig. 8, no. 1).

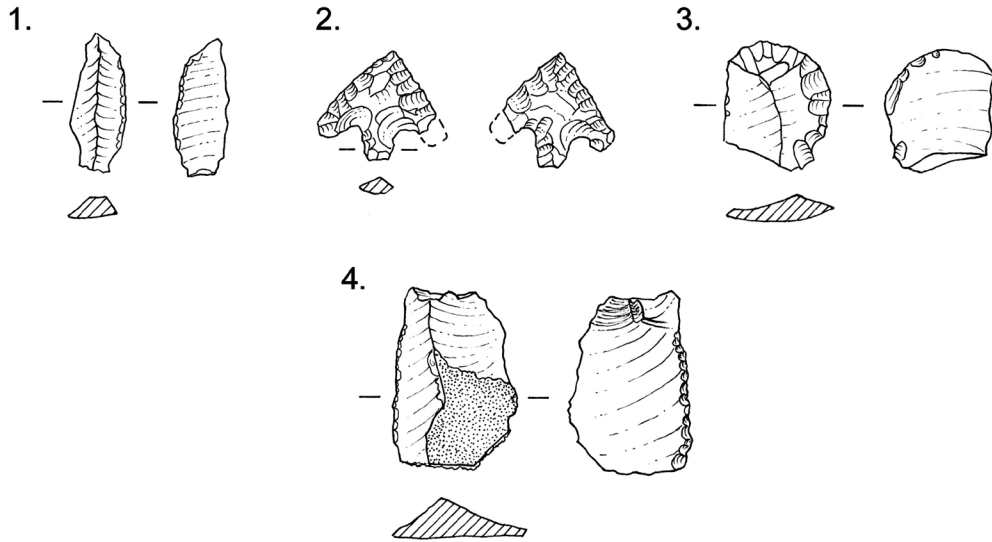


FIG. 8. Finds of flint: 1, Later Mesolithic type rod; 2, Bronze Age barbed and tanged arrowhead; 3, end scraper; 4, utilised flake (scale 50%)

Barbed and tanged arrowheads

One arrowhead was recovered, a good example of Green's 'Sutton Type' – a form common in the Bronze Age of northern England (Green 1980, 117-43).

Scrapers

One example of an end scraper was recorded (Fig. 8, no. 3).

Utilised flakes

Three utilised flakes were recorded (catalogue nos. 2, 12 and 14). Of these, no. 2 is a dark grey secondary flake broken transversely at its distal end.

Waste flakes

Seven waste flakes were recorded. These included one broken primary flake (catalogue no. 1), one burnt and broken secondary flake (catalogue no. 8), four complete inner flakes (catalogue nos. 4, 5, 11 and 17) and one complete secondary flake (catalogue no. 7). Bulb and butt types can be categorised as follows:

<i>Bulb Type</i>	<i>No.</i>
Pronounced	3
Diffuse	2
<i>Butt Type</i>	<i>No.</i>
Plain	3
Cortical	1
Irregular	1

Complete flakes range in length from 6–30 mm, with an average length of 15.8 mm and in breadth from 10–21 mm, with an average breadth of 16.4 mm.

Chips and natural pieces

Two flint chips and two natural pieces were also recorded.

Discussion of the flint

The range of flint material recovered is clearly of a date range spanning the Later Mesolithic to the Early Bronze Age and as such raises some interesting questions about the role of the Tortie Stones as focal points in the landscape over a long period of time. The microlith (catalogue no. 15) would not be out of place in any Later Mesolithic flint assemblage from the North Pennines and the uplands of Eastern Cumbria (see Young, 1987; Cherry and Cherry 1987, 1-67), and likewise the barbed and tanged arrowhead would sit comfortably within the region's Bronze Age lithic assemblages.

Discussion

Excavation has demonstrated that neither the Tortie Stone nor the adjacent small boulder, Tortie 1a, had ever been set upright in sockets; indeed, neither stone would lend themselves to this purpose. Irregularities in the subsoil surface, and especially the concentrations of small stones and gravels around the boulders, appear to be the result of these areas having been sheltered from plough erosion by the boulders. The field in which they lie was rough pasture until WWII and was ploughed for only a few years during war time. The lower west side of Tortie 1a bears a number of grooved marks inflicted probably by the lifting of a hydraulic plough.

Tortie shares the general eastern location of the majority of Cumbrian rock art (Barrowclough 2011, Fig. 77), although it stands apart from the main concentration of sites, which is to be found in the Eden valley to the south. Only the cup-marked boulder at Gillalees Beacon lies north of Tortie (Brown and Brown 2008, Fig. 100). Tortie is located on a south-west facing slope of Tortie Hill with views to the west which are not far-reaching. To the south the view is closed by the escarpment of Brown Fell, while Whinny Fell and Talking Fell limit views to the west to around 0.5 km. The site therefore has views to a somewhat limited landscape which in prehistory are likely to have been further modified by woodland.

The chronology of prehistoric rock art remains somewhat unclear, the decoration on earthfast rocks such as Tortie 1 and the nearby block, Tortie 2, is generally thought to originate during the Neolithic, although hard-and-fast evidence is lacking. An association between decorated rock and Grooved Ware and contemporary lithic items has been suggested for Backstone Beck, West Yorkshire (Edwards and Bradley 1999, 76), but this is only a general association. Equally, the suggested dating of rock art on Tiger Rock, Torbhlaren, is reliant on a somewhat unsteady edifice of assumptions as well as the unproven suggestion that quartz pebbles were utilized in the creation of rock art (Jones *et al.* 2011, 59). Whatever the initial date for rock art, it is clear that cup-mark decoration on small 'portable' blocks continued into the Early Bronze Age, when they were deposited in burial mounds (Vyner 2007, 102-107).

The function of prehistoric rock art also remains unresolved, although a number of suggestions have been put forward, including the possibility that decorated rocks were associated with prehistoric routes. However, the limited extended views from and to the Tortie Stone suggests that if rock art was associated with routes into the monumental landscape of Cumbria, as the Browns suggest (Brown and Brown 2008, 209-14), it must have acted in conjunction with a range of other features. Indeed, marked stones are such inconspicuous features that it seems likely that more obvious landmarks must have served as the principal route markers, the decorated stones only serving to indicate the identity of particular locations.

The nature of potential associations between lithic material and rock art has been considered by Bradley (1997, 93-104). His discussion was perforce limited to a consideration of fieldwalking finds rather than excavated material, but he was able to conclude on the basis of surface finds that simpler rock carvings such as cup-marked stones 'were most probably in settlement areas', while more complex carvings were more probably on the outer limits of settlement landscape (Bradley 1997, 104). The topic has not greatly advanced since then, although an association between lithic material and earthfast decorated stones has been suggested in respect of an excavated area at Backstone Beck, Ilkley Moor, West Yorkshire (Edwards and Bradley 1999, 76). That some doubt may be cast on this is suggested by the association of lithic material with both plain and decorated earthfast rocks on Fylingdales Moor, North Yorkshire (Vyner 2008). The excavation of Tortie 1 and 1a throws further light on this notion. The presence of lithic material around small boulder Tortie 1a is interesting because of its limited quantity and its chronological range – from possibly as early as the Mesolithic, through the Neolithic and into the early Bronze Age. In itself this hardly illustrates an association with rock art, particularly as only a single putative cup-mark is present on the boulder. By comparison, the absence of lithic material round the decorated boulder that is the Tortie Stone is surely instructive. The Tortie Stone is a substantial boulder with an upper surface some 1.25m above the surrounding ground level. While its upper surface can be worked or observed by someone in an upright position, the boulder does not provide a particularly accessible or comfortable seat. Tortie 1a, however, is a small boulder which offers a convenient a sitting spot. It seems clear that the distribution of lithic material around earthfast boulders at Tortie, at

least, related more to the opportunity of a comfortable seat to episodically visiting hunter-gatherers than to any association with rock art.

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Thanks are due to the landowners for permission to excavate and for permitting site cabins to be set up, respectively Peter Dean and John Oliver. Excavation was undertaken by volunteers from the North Pennines Area of Outstanding Natural Beauty Altogether Archaeology group: Ruth Ansell Davis, Phil Bowyer, Anne Bowyer, Jane Brantom, Lorraine Clay, Dorothy Coe, Liz Cook, Richard Cox, Carol Dougherty, Heather Edwards, Colin Goodfellow, Martin Green, Derek Gunby, Michael Hall, Sue Manning, Paul Manning, Carol Mitchel, Rob Pearson, James Pease, Michael Powell, Sarah Robley, Richard Stevens, Brian Stirk, Janet Stirk, Chris Wilson, Janet Woodman, managed by Paul Frodsham, AONB Archaeology officer, who also assisted the excavations in many other ways. Final illustrations were the work of Louise Hutchinson and Dawn Knowles. Acknowledgement is also made to Paul Brown, who visited the excavation and made a number of helpful comments on the rock art, and to Rob Young for provision of the flint report. As so often previously, I am grateful to Steve Sherlock for welcome company and logistical support, as well as acting as site supervisor.

Catalogue

All descriptions are written with the bulbar end of the piece to the top and dorsal side uppermost. All measurements are in millimetres. The catalogue numbering sequence is as follows: Site abbreviation (TS), year (11), context number and small find number. All data has been taken from finds bags.

Excavated material

- 1 Primary flake from shattered grey flint pebble. Dorsal face retains very hard, smoothed and rolled, white/fawn pebble cortex. Large fawn inclusion at bulbar end which is irregularly shattered. Piece probably comes from an attempt to 'test' or open up a flint pebble prior to knapping. TS11 A (1)
- 2 (Fig. 8, 4) Dark grey secondary flake broken transversely at distal end. Detached distal end of a grey inner flake, exhibits shallow retouch around the distal end and the left edge, dorsal face, maximum dimensions 17x15x4 mm. TS11 A (3)
- 3 Small grey translucent flint chip. TS11 A (3)
- 4 Irregular, squat, light grey inner flake. Plain butt, diffuse bulb. 6x10x3 mm. TS11 A (3)
- 5 Squat, light-grey, inner flake. Diffuse bulb, cortical butt, and hinge fracture at distal end. 10x11x2mm. TS11 B (2)
- 6 (Fig. 8, 3) End scraper on distal end of grey inner flake, broken transversely at bulbar end. Very shallow retouch on distal end and left edge, dorsal face. 17x15x4.9 mm. TS11 B (2) sf1
- 7 Cream grey secondary flake retaining small patch of hard fawn/ginger cortex on right edge dorsal face. Plain butt, pronounced bulb. 16 x13x5mm. TS11 B (2) sf2
- 8 Lightly calcined and broken secondary flake retaining a small patch of hard fawn cortex on right edge, dorsal face. Spalling evident on dorsal face and irregularly shattered at bulbar end and on left edge. Pronounced hinge/step fracture at distal end. Both faces exhibit fine hair-like crackles from heat damage. TS11 B (2) sf3
- 9 Irregular shale/mudstone fragment? Natural. TS11 B2 4
- 10 Chip from distal end of light grey flint flake, exhibits slight hinge fracture. TS11 B (2) sf5
- 11 Grey inner flake, pronounced bulb, feather termination. Thin plain butt and one previous flake removal on dorsal face at bulbar end. 17x13x4mm. TS11 B (2) sf6
- 12 Grey inner flake. Diffuse bulb, pronounced bulbar scar, and plain butt. Left edge exhibits some small flake /chip removals? Through use. One clear previous flake scar visible on dorsal face. Feather termination. 19x13x2mm. Utilised flake. TS11 B (2) sf6

- 13 (Fig. 8, 2) Finely made barbed and tanged arrowhead of Green's Sutton Type (Green 1980). On a grey inner flake. Point still sharp and fresh but one barb snapped transversely. 16x18x5mm, tang length c.5mm. Finely pressure flaked on all edges. Small-scale ripple flaking visible on blade edges. TS11 B (2) sf7
- 14 Distal end of a grey flake irregularly shattered. Exhibits slight hinge fracturing at distal end. Left edge retains small patch of steep retouch, dorsal face. ?broken from a retouched flake or blade. Retouched flake/blade fragment. TS11 B (2) sf8
- 15 (Fig. 4, 1) Rod-like microlith on inner flake in cream flint. Steep retouch on left edge. Bulbar end removed transversely to long axis. 18x7x2mm. TS11 B (2) sf8
- 16 Quartzite chip? Natural. TS11 B (2) sf9

Material recovered from fieldwalking

- 17 Traverse 3, 73, NY 58937 57937. Dark grey mottled inner flake. Plain butt, pronounced bulb and bulbar scar. Irregular chips removed on right edge, bulbar face? from plough damage? 30x21x6mm.

Ceramics

Topsoil in Area A contained a sherd from a thin-walled glazed jug, late nineteenth or earlier twentieth century.

Other finds

Sf9 Quartz fragment

The topsoil in Area A also contained modern glass fragments, quartz pebbles and pieces and fragments of coal, all discarded.

Topsoil in Area B contained fragments of shattered shooting clays, quartz pebbles and pieces and fragments of coal, all discarded.

Fragments of ceramic land drain were present in the topsoil in both excavated areas, presumably the result of plough encounters.

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