Bramhall, Stockport

Bronze Age Human Remains and other Features

by Patrick Daniel*
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Excavation between Poynton and Bramhall in advance of the A6 Manchester Airport Relief Road exposed features containing pottery of Bronze Age appearance and cremated human remains radiocarbon dated to the Middle Bronze Age. These features were found alongside an undated 10.75m-diameter ring gully presumed to be a ceremonial feature of similar date. Other remains included post-medieval ponds and field boundaries. A pit containing a rich archaeobotanical assemblage of seeds of wild plants and rye grains was radiocarbon dated to the late fourteenth–early fifteenth century AD, and provides a regionally rare insight on landuse and crop exploitation during the medieval period. There was no clear evidence of the proposed course of the Manchester–Buxton Roman road, which was thought at the time of fieldwork to possibly pass through the excavation area, although some undated ditches did follow its presumed course.

Located both on the interfluve between two water courses and at the interface of the Cheshire Plain and the toe of the Pennines, the ring gully may have been constructed to formalise an important point in the landscape, with its use related to territorial negotiations between different social groups. For Greater Manchester, the results represent a rare example of a lowland Bronze Age ceremonial site excavated to modern standards.

The project archive is currently stored at the offices of Wessex Archaeology in Sheffield and will be deposited in due course at Stockport Museum under the accession number STOPM:2015.240.

Introduction <A>Patrick Daniel

The project and the site <B>

In 2015–2016 a programme of archaeological works, comprising watching brief, trench evaluation and strip, map and record excavation, was undertaken along the course of A6 Manchester Airport Relief Road by Wessex Archaeology. The eastern end of the new road corridor lay at Hazel Grove (NGR SJ 93350 85700), from where it followed a bow-shaped course, 12km in length, to its western terminal near Manchester airport (SJ 82050 85620). Excavated remains were chiefly post-medieval in date, and included the former toll house and corn mill at Norbury and relict field boundary ditches.

The earliest remains were excavated on land between Bramhall (Stockport) and Poynton (Cheshire) and comprise a ring gully and pits with, variously, pottery of Bronze Age appearance, cremated human remains radiocarbon dated to the Bronze Age and concentrations of heat-affected stone. Some of the pits were found alongside grave-like features; remnants of medieval and post-medieval agriculture were also recorded. It is this portion of the road corridor, referred to hereafter as ‘the Bramhall site’, that forms the subject of this report

The Bramhall site occupied 1.7 hectares immediately north of the A5149 Chester Road between Poynton and Bramhall (NGR SJ 90130 83700; Fig. 1). Prior to the road construction, the local ground surface was gently undulating: the highpoint (93.8m OD) lay in the north-east of the site, where the ring gully was located. The underlying geology is mapped as Sandstone of the Chester Formation with

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superficial deposits of Diamicton Till (British Geological Survey online viewer). The land comprised rural fields used for grazing and cultivation.

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Archaeological and historical background <B>

This was the only site along the road scheme where clear evidence of prehistoric activity was recorded, although this was a fortuitous discovery, as the purpose of the fieldwork here was to investigate the Roman road linking Buxton and Manchester (Mouchel 2013, 116; UMAU 1996 and 1998), which was thought to cross this part of the road scheme. In the event no direct traces of the road, or any Roman artefactual material, were seen, although some undated ditches at the western end of the site did follow its presumed north-west to south-east course (Fig. 2). Work on the site also sought to expose a house marked as 'Bowerstumps' on 18th- and 19th-century maps, although it transpired the structure lay just beyond the available area.

With the exception of the proposed course of the Roman road, known sites of archaeological or historical significance within 1km of the excavations are almost entirely of post-medieval date and include, along with the site of 'Bowerstumps', a 19th-century brickworks at Poynton, and various structures such as pillboxes and farmhouses. Tithe and early Ordnance Survey mapping show the site subdivided into fields, some of which contained ponds. The proposed course of the Roman road appears on Ordnance Survey maps from the 1870s/80s onwards.

The excavation <A> Patrick Daniel

Ring gully 9273 <B>

Due to the archaeological potential of the site (above) a watching brief was maintained during soil-stripping during the construction of the road and an associated works compound area. A ring gully (9273) was uncovered in the north-eastern corner of the site and coincided with its topographic highpoint. The gully formed a complete circle enclosing an area with an inner diameter of 9.5 m and an average outer diameter of 10.75m (Fig. 3). The gully itself was typically 0.6 m wide but narrowed to just 0.27m on its northern edge.

Multiple slots set at one-metre intervals excavated around the circumference revealed a gently sloping cut with a rounded base (Fig.4.2–5) filled with mid-brown sandy silt containing occasional subangular stones and sparse charcoal. Some evidence of recutting was noted along the southern and western edge of the gully. No finds were recovered. Environmental samples taken from the fills of the ring gully supplied no useful information, with plant remains restricted to underground plant parts such as roots and tubers. Ring gully 9273 had been cut by a medieval or post-medieval cultivation furrow and a modern land drain (not illustrated).

The whole of the area enclosed by ring gully 9273 was cleaned by hand, with a number of features subsequently investigated. The central feature (9268: 2 x 0.6 x 0.46m) had a 'U'-shaped profile, flattish base, and an ESE–WNW alignment. It contained three fills; the primary fill, 9270, was a very thin (0.02 m) lens of almost black silt. This was sealed by a heavily bioturbated and fairly loose fill with a high content of redeposited natural: 9275. The upper fill, 9269, was 0.28m deep. A charred tuber and hazel nutshell from fill 9269 were submitted for radiocarbon assay and returned inconsistent medieval and Iron Age dates: cal. AD 1230–1300 and 360–100 cal BC (UBA-34327; 729±28 BP and UBA-34328; 2157±28 BP). Despite its grave-like appearance and position within the ring gully, no bone was present within this feature, which had evidently been disturbed.

A further two stakeholes, two postholes and two or three shallow pits also lay within the area enclosed by the ring gully. None contained any artefactual material, although charcoal was noted in one

posthole (9252: 0.43m dia. x 0.3m). One pit (9250) appeared to be cut by the ring gully, and so would pre-date that feature.

Seven sherds (22g) of pottery of likely Bronze Age date and heat-affected stone were excavated from pit 9264 (0.4m dia. x 0.14m deep), which lay 4m south-west of the ring gully.

Potential mortuary focus <B>

A pit with cremated human bone and a group of five grave-like features lay 20 m south-east of the centre of the ring gully (Fig. 3).

The pit (9191: 0.63m dia. x 0.35m; Fig. 4.6) contained three fills: the basal, 9194, was a mid-brown silty sand, overlaid with 9193, a greyish black silty sand containing abundant charcoal and cremated human bone. A deposit of yellowish grey silty sand, 9192, completed the infilling of the pit. A total of 30.6 g of human bone was present, representing the meagre remains of an unsexed individual more than 12 years of age (subadult/adult range). A human bone fragment from fill 9192 returned a radiocarbon date of 1380–1130 cal BC (SUERC-74086; 3011 ± 27) and a hazelnut from fill 9194 dated to 1280–1100 cal. BC (SUERC-74086, 2970±26 BP), indicating a Middle Bronze Age date for the activity overall (see below). No pathological lesions or materials suggestive of pyre goods were observed.

The grave-like features (average dimensions 2.36 x 0.66 x 0.23m) lay immediately north-west of the pit and shared an ENE–WSW alignment (Fig. 3 and 4.7–8). Four (9055, 9060, 9062 and 9232) formed a regular arrangement, the fifth (9197) lay a further 3m to the south. Each contained a single fill of brown sandy silt, artefactually sterile in all cases except for the southern outlier, which supplied two flints, one being a Mesolithic microlith (see below). As with the ring gully's central pit, no bone was recovered from these features despite their grave-like appearance.

Other features <B>

A scatter of five small pits containing heat-affected stone (9018, 9019, 9025, 9047 and 9050) was found in the vicinity of the ring gully.

A circular feature (9111: 2m dia. x 0.24m deep; Fig. 2 and 4.1) located near the south-east corner of the site contained evidence of burning and crop-processing (see below). The central area of the base of this feature appeared scorched. A rich assemblage of charred plant remains, dominated by cereal grains—mostly grains of rye (*Secale cereale*) and possibly cultivated oats (*Avena* sp.), in smaller numbers—was recovered from its fills. Rye and oats would suggest a medieval or later chronology for the feature, and this has been confirmed by radiocarbon dating, with a rye grain returning a date of cal. AD 1390–1420 (UBA-40985; 571 ± 25 BP).

Pit 9111 had been cut by a right-angled length of ditch (9283). Further relict field boundaries lay in the western part of the site, with these forming a grid with a prevailing NNW–SSE axis, along with two backfilled ponds. These features were either undated or provided post-medieval finds; some corresponded with features depicted on 19th-century Ordnance Survey maps. A group of stone-built and ceramic land drains in the south-west corner of the site is thought to have served the backyard area of 'Bowerstumps', with the footprint of the structure itself lying just beyond the excavated area.

The finds <A> Lorraine Mepham

This report summarises the range of material recovered during excavation; further detail can be found in the assessment report (Wessex Archaeology 2019) and in the project archive.

Pottery <B>

Seven sherds of prehistoric pottery were recovered from pit 9264. All are in a coarse, quartz-gritted fabric (quartz inclusions subangular, <3mm, in a coarse matrix). The sherds are small and undiagnostic; none conjoin but it is possible that they all belonged to a single vessel. The absence of any diagnostic features hampers close dating, but the sherds have been dated on fabric grounds as Late Bronze Age or Iron Age (see, for example, Nevell 1987–88, 40–1).

Flint <B>

Two pieces of worked flint came from feature 9197 and provided the only dating evidence for this feature (and indeed for any of the five grave-like features around pit 9191 in the potential mortuary focus), though whether either or both were redeposited finds or not is uncertain. One is a broken flake, which is not closely datable, and the other is a Mesolithic microlith of Clark's form B3 (Clark 1933).

Cremated human remains <A>Jacqueline I McKinley

Introduction <B>

Cremated bone was recovered from three contexts within pit 9191, situated approximately 15m south-east of ring gully 9273 (Figure 2; Section 6). Radiocarbon analysis of samples of bone and fuel ash from the feature have indicated a late Middle Bronze Age date for the cremation (see below).
The nature of the deposits was assessed from the combined osteological and site context data. Assessment of age and sex of the remains were based on standard methodologies (Buikstra and Ubelaker 1994; Scheuer and Black 2000). Cremated bone was retrieved from all the residues, including the smaller fractions (<2mm) which are normally only subject to a scan.

Results <B>

Although some minor horizontal truncation may have occurred, pit 9191 had survived to a relatively substantial depth (0.35 m) and it is unlikely than any bone will have been lost due to disturbance. No cremated bone was evident at surface level, and the deposit containing most fuel ash – 9193, stratigraphically located below 9192 and above 9194– was exposed at surface level only in the northern third of the feature (Section 6).

The bone is heavily eroded with a chalky appearance, rendering much of it morphologically indistinct, and little trabecular bone survives – the latter is often subject to preferential loss in an aggressive burial environment, in this case a silty sand. Although it is probable that some bone loss will have occurred due to taphonomic factors related to the acidic nature of the burial environment, the overall scarcity and dispersed distribution of bone within the deposits suggest any such loss is likely to have been small.

The 43g of generally small fraction bone (majority <10mm, 29% 2mm or less; maximum fragment 18mm) includes elements of skull (including two fragments of tooth root), upper and lower limb long bone shafts. It represents the meagre remains (an estimated 2.7% of the expected average weight of bone from an adult cremation; McKinley 1993) of an unsexed individual >12 years of age (subadult/adult range). The bone is well oxidised (white in colour). No pathological lesions or materials suggestive of pyre goods are present.

The form and distribution of the archaeological components within pit 9191 are not commensurate with a burial deposit, rather indicting a potentially formal deposit of pyre debris (McKinley 1997; 2013a). The presence of this material indicates that cremation was taking place in the vicinity and burial deposits pertaining to the rite – both from the same cremation as represented here and others – might be present outside the area of investigation. Alternatively, since cremated remains are by nature divisible and transportable, the rest of the bone from the cremation – which would have amounted to a substantial amount given the very small quantity present here – could have been taken for burial

elsewhere or subject to curation; portions of it might have been distributed as *memento mori*, or some or all could have been scattered (McKinley 2006; 2013a).

Cremation was a common rite in the Middle Bronze Age and large cremation cemeteries comprising >50 burials have been found in various parts of the country, e.g. Dorset and Leicestershire (Chapman 2011; McKinley 2013b; White 1982), together with more moderately sized cemeteries of 20–40 graves, e.g. in Dorset, Nottinghamshire and Staffordshire (Allen *et al.* 1987; Denston 1981; Martin and Allen 2001; McKinley 2017; Rogers 1991). Ring ditches and barrows frequently feature in these cemeteries, and other forms of cremation-related deposit are commonly observed. Numerous small grave groups and singletons of similar date are also known from the regions served by these cemeteries, and the implied variability in the mortuary landscape demonstrates either different mechanisms affecting the choice of burial place, including longevity of use and collective cultural memory attached to specific places in the landscape, or possibly the existence of some larger centres within what were probably otherwise relatively sparse and dispersed rural populations.

Charred plant remains <A> Inés López-Dóriga

Methods <B>

The bulk samples were processed by standard flotation methods on a Siraf-type flotation tank; the flot retained on a 0.25 mm mesh. Dried residues were fractionated into 5.6/4 mm and 1 mm fractions. The coarse fractions (>5.6/4 mm) were sorted by naked eye and discarded. Environmental material extracted from these residues was added to the flots. For the assessment, the flots were scanned using stereo incident light microscopy at magnifications of up to 40x and the abundance of remains was qualitatively quantified (A*** = exceptional, A** = 100+, A* = 30-99, A = >10, B = 9-5, C = <5) as an estimation of the minimum number of individuals. For the analysis, all identifiable charred plant remains were extracted from the flot and the <4mm residue fractions of the selected sample. The analysis data was recorded with the software Arbodat (Kreuz and Schäfer 2002) for the purpose of data sharing. Analysis quantifications are given as MNI (minimum number of individuals) and are based on anatomy (whole items or the highest type of anatomical fragments). Identifications follow the nomenclature of Stace (1997) for wild plants, and traditional nomenclature for cereals, as provided by Zohary *et al*. (2012), and were made with reference to specialised atlases and modern reference collections where appropriate.

Results <B>

The results of the assessment of the environmental evidence are presented in detail in the assessment report (Wessex Archaeology 2019). In general, the environmental evidence was rare, restricted to a few wood charcoal fragments in many samples, and when present, charred plant material was poorly preserved. The only slightly significant evidence was retrieved from pit 9111 from the current site, which is discussed in detail below.

The assemblages from the pit with cremated human bone (9191), grave-like features 9055, 9232, 9197 and ring gully 9273 (including the central feature 9268) were generally poor and restricted to underground plant parts such as roots and tubers, among which false oat-grass or onion-couch (*Arrhenatherum elatius* subsp. *bulbosum*) was prominently identified. Some of the assemblages also included seeds from a variety of wild plants, such as grasses (including *Briza* sp. and *Poa/Phleum*), dog violet (*Viola* sp.), docks (Polygonaceae, *Polygonum* sp.), sedges (Cyperaceae), composites (Asteraceae), buttercups (*Ranunculus* sp.), pinks (Caryophyllaceae), wild radish (*Raphanus raphanistrum*) and toadflax (*Linaria* sp.). Remains of berries and nuts, from elder (*Sambucus* sp.) and hazel (*Corylus avellana*) were also present in some of these samples.

A rich archaeobotanical assemblage was recovered from pit 9111 (Table 1), in the south-east corner of the site, from which a cereal grain (rye) was radiocarbon dated (UBA-40985: 571±25 BP, cal. AD 1390–1420). The assemblage consisted of seeds of wild plants and cereal grains. The cereals were mostly grains of rye (*Secale cereale*) and possibly cultivated oats (*Avena* sp.), in smaller numbers. No

cereal chaff other than two culm node fragments were found. The seeds of wild plants, included corn spurrey (*Spergula arvensis*), annual knawel (*Scleranthus annuus*), stitchwort (*Stellaria* sp.) and other taxa in the pink family (Caryophyllaceae), orache (*Atriplex* sp.) and other goosefoot (Chenopodiaceae), sedges, docks (*Rumex* sp., Polygonaceae), dog violet (*Viola* sp.), the mustard family (Brassicaceae), broom/gorse (Genisteae), trefoil/medick/clover (Trifolieae), vetch (Vicieae and *Vicia* sp.), cornflower/knapweed/star-thistle (*Centaurea* sp.), oxeye daisy (*Leucanthemum vulgare*) and other composites (Asteraceae) and cat's tail/meadow grass (*Poa/Phleum*). Seeds/stones of fruits, such as blackberry/raspberry (*Rubus* sp.) and hawthorn (*Crataegus monogyna*) were also present.

Table 1: Results of the analysis of charred plant remain assemblage in pit 9111

Feature		**9111**
Context		**9112**
Sample		**9010**
Vol (L)		**20**
Flot size		**125**
Bioturbation (Roots %, etc)		**30%, A, E**
Wild plants		
Atriplex sp. achene	Orache	1
Chenopodiaceae seed	Goosefoot family	1
Stellaria sp. seed	Stitchwort	4
Scleranthus annuus capsule	Annual knawel	2
Spergula sp. seed	Corn spurrey	144
Caryophyllaceae achene	Pink family	2
Polygonum sp. achene	Knotgrass	1
Rumex sp. achene	Docks/sorrel	1
Polygonaceae	Dock/knotgrass family	106
Viola sp. seed	Dog violet	1
Brassicaceae seed	Mustard family	2
Rubus sp.	Blackberry/raspberry	1
Crataegus monogyna endocarp	Hawthorn	2
Genistae seed	Broom/gorse	1
Trifoliae seed	Trefoil/medick/clover	1
Vicia sp. seed	Vetch	2
Vicieae seed	Vetch/grass pea	1
Centaurea sp. seed	Cornflower/Knapweed/Star-thistle	3
tp. *Leucanthemum vulgare* seed	Oxeye daisy	3
Asteraceae seed	Daisy family	3
Cyperaceae seed	Sedge family	5
Poa/Phleum grain	Meadow grass/Cat's tail	1
Cereals		
Avena sp. grain	Oat	32
Secale cereale grain	Rye	97
Triticeae grain	Cereal	12
Triticeae grain fragment	Cereal	81
Poaceae grain	Grasses	4
Poaceae culm fragments	Grasses	3
Indet seed		21

Discussion <B>

The significance of the prehistoric archaeobotanical assemblages is uncertain, but they may be comparable, particularly in the remains of false oat-grass tubers, to other funerary deposits (e.g. Roehrs *et al* 2013) and might represent plant plants that become charred, accidentally or intentionally, in the course of the cremation ritual, perhaps deliberately used as fuel, or just present in the natural vegetation or soil seed bank.

The most significant environmental evidence from the site is in fact from the late medieval period, in spite of the absence or rarity of structural or artefactual remains. Although only one deposit from this phase provided enough archaeobotanical evidence, there is so little archaeobotanical information of

that period in north-west England, particularly from rural and non-waterlogged sites (e.g. Hall and Huntley 2007, Moffett 2018, van der Veen *et al.* 2013), that this deposit contributes key material to help filling the date gap.

The assemblage from pit 9111 is indicative of crop-processing activities and these were initially assessed as being of medieval or later date due to the presence of cereal crops such as rye and oats. Radiocarbon dating confirmed the deposit to date to the late fourteenth–early fifteenth century (see below). The rarity of cereal chaff, rather than being the result of differential preservation bias (Boardman and Jones 1990) more likely suggests the samples originated in the latter stages of crop processing (van der Veen 2007), which in free-threshing cereals are the ones that occur in domestic settlements, with most of the chaff being removed upon threshing far from habitation areas (Hillman 1981). Although identification of the oat to species level was not possible due to the absence of chaff (lemma bases), the large seeded grains and the chronology of the deposit suggest was probably intentionally cultivated, rather than a weed, and both common oat (*Avena sativa*) and bristle oat (*A. strigosa*) were cultivated. Wheat, tentatively identified upon the assessment of the sample, was not found to be positively present in the sample after detailed examination. The cultivation of oats, particularly the brittle species, is consistent with cultivation practices in hardier regions (Moffett 2018) whilst rye is tolerant to drought, and acid and poorer soils than wheat (Rippon *et al.* 2014). The vetch seeds, not identified to species level due to poor preservation, could have been either wild or cultivated (Moffett 2018). The many wild plants whose seeds are present in the assemblage might have acted as crop weeds; some of them are generalist plants adapted to any environmental conditions, others have not been possibly identified to specific level, but some are informative of particular habitats. Some plants are indicative or nutrient-rich soils, such as waste ground around green gardens (docks, orache etc) but others, such as annual knawel, now a rare plant and not currently present in the area according to the BSBI (BSBI 2019), knapweed and corn spurrey, an archaeophyte (Preston *et al*. 2004) also in decline, used to be arable weeds of disturbed and less fertile sandy soils. Rasp/blackberries and hawthorn berries may have been gathered from the wild, but the plants could also have been grown within gardens (Moffett 2018). The assemblage has many similarities with that slightly older but recently investigated at the Knutsford to Bowden bypass (López-Dóriga in Daniel in prep.), also rich in rye and oats and a similar weed assemblage. The co-ocurrence of fruit seeds, cereal grains and weed seeds suggests this assemblage originates in the discard of domestic by-products from a neighbouring settlement which has not been identified.

Radiocarbon dates<A> Inés López-Dóriga

Methods <B>

Five radiocarbon dating samples were submitted, with the purpose of achieving a better understanding of the chronology of ring gully 9273, nearby mortuary activity and pit 9111.
Two short-lived samples of charred plant remains from the fill of the ring gully; two samples from the pit with cremated human bone (one of human bone and another one from hazelnut shell) and a short-lived sample of charred plant remains from pit 9111 were submitted.

The radiocarbon samples were submitted to the ^{14}CHRONO Centre, Queen's University, Belfast and the Scottish Universities Environmental Research Centre (SUERC), University of Glasgow. Reporting of the radiocarbon dating results follows international conventions (Bayliss and Marshall 2015; Millard 2014). The macrofossil samples were treated with acid and the measurement corrected using AMS δ13C values. Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar *et al*. (2016). The calibrated age ranges were calculated with OxCal 4.2.3 (Bronk Ramsey and Lee 2013) using the IntCal13 curve (Reimer *et al*. 2013). All radiocarbon dates are quoted as uncalibrated years before present (BP), followed by the laboratory code and the calibrated date-range (cal. BC) at the 2σ (95.4%) confidence, with the end points rounded out to the nearest 10 years. The ranges in plain type in the radiocarbon tables have been calculated according to the maximum intercept method (Stuiver and Reimer 1986).

Results <B>

Table 2: Radiocarbon results

Lab. Ref	Sample reference	Feature	Material	Date BP	δC13‰ (IRMS)	Calibration (2 sig. 95.4%)	Phase
UBA-34327	107970_(9269) <9022> I	9268	Charred plant remain: *Corylus avellana* shell fragment	729 ±28		cal. AD 1230-1300	Medieval
UBA-34328	107970_(9269) <9022> II	9268	Charred plant remain: Tuber	2157±28		360-100 cal. BC	Middle Iron Age
SUERC-74086	107970_(9192)	9191	Cremated human bone (1.7 g)	3011±27	-23.3‰	1380-1130 cal. BC	Middle Bronze Age
UBA-40983	107970_(9191) <9041>	9191	Charred plant remain: *Corylus avellana* shell fragment	2970±26		1280-1100 cal. BC	Middle Bronze Age
UBA-40985	107970_(9112) <9010>	9111	Charred plant remain: *Secale cereale* grain	571 ±25		cal. AD 1390-1420	Medieval

Discussion <B>

The two samples from the upper fill of the central feature within the ring gully (UBA-34327 and UBA-34328) provided internally inconsistent results: one medieval (729±28 BP, cal. AD 1230–1300) and the other one Iron Age (2157±28 BP, 360–100 cal. BC). This inconsistency is not entirely surprising, since intrusion is a relatively common phenomena within assemblages (e.g., Pelling *et al*. 2015), particularly from more superficial deposits, and there is not necessarily direct association between the material present in the fill of cut features (Waterbolk 1971). A lack of further material for dating prevents another measurement to clarify the chronology of this feature

The most reliable date so far for the human activity at the site was provided by the pair of measurements from the pit with redeposited pyre debris, obtained on cremated human bone (SUERC-740863011±27 BP: 1380–1130 cal. BC) and a hazelnut shell fragment (SUERC-74086, 2970±26 BP: 1280–1100 cal. BC). Measured ages on cremated bone may be artificially old due to the exchange of carbon between the bone and the fuel (potentially affected by old-wood effect) during the cremation process (e.g. Olsen 2013) so a paired date is advisable to verify potential offsets. The two measurements show that there may be a slight old-wood effect but they are still consistent, as they passed the X2-test (Fig. 5), providing a more accurate and precise result for the activity: 1280–1130 cal BC, i.e., Middle Bronze Age; the appearance of the feature is not at odds with other funerary/mortuary remains of the period. The late medieval result on the rye grain (UBA-40985: 571±25 BP: cal. AD 1390-1420) confirmed the expected chronology of the environmentally rich deposit in pit 9111.

Overall discussion <A> Patrick Daniel

The earliest dated find, the Mesolithic microlith, adds to the slight but growing body of evidence for human activity in the area in the period. Given the topographic setting of the site (see below) it may support Arrowsmith's suggestion (1997, 10) that the Mersey valley offered a route for hunter-gatherers moving between the uplands and lowlands, although there are limits to what can be inferred from the presence of a single artefact.

Based on its form, its central grave-like feature, and the recovery of Bronze Age pottery, cremated human bone, flint and heat-affected stone from other features in its vicinity, the ring gully is presumed to represent a Bronze Age mortuary monument. It may originally have existed as a round barrow, with the mound since flattened by ploughing, or a ringwork with accompanying bank.

The presence of the group of grave-like features to the south of the ring gully may offer circumstantial support for the notion that it represents the remains of a barrow or similar, as such features are known to have been used as inhumation cemeteries in the early medieval period (Williams 1997), with a prominent local example being Winwick, Ch., (Freke and Thacker 1987; Fig. 6). The Bramhall site also bears comparison results from Bucklow Hill, Ch., where during the course of the A556 improvement works, a ring gully with cremated human bone and around a dozen accompanying grave-like features, were recorded, although no human bone was found in the 'graves' in this instance (Wessex Archaeology 2017; Daniel, in prep.). As at Bucklow Hill, the absence of any bone from the proposed inhumation graves at the current site may be due to hostile soil conditions: the Soilscapes viewer lists the local soils as 'slightly acidic', although the resolution of the mapping is not particularly high (Cranfield University 2018).

Within the wider vicinity of the Bramhall site, the locations of prehistoric mortuary monuments appear concentrated along the higher ground of the western fringe of the Pennines (Fig. 6). Several barrow mounds are located around Alderley Edge, 7km south-west of the site, and are more numerous on the hills above Macclesfield and Bollington, approximately 7km to the south-east of Bramhall. Very few of these features have been excavated. Of Bronze Age monuments opened in the modern period, the closest lies at Shaw Cairn, 9km north-east of the site. In contrast to the low-lying situation of the Bramhall site, Shaw Cairn lies at 327m; a trig point set into the cairn marks the highest point in Stockport Borough (Noble 2010, 3). Shaw Cairn has a more monumental appearance than the Bramhall site, perhaps reflecting the readier availability of stone: it comprises a kerbed cairn approximately 15m in diameter. There is also more profuse evidence of funerary usage, with over ten cremation burials excavated; grave goods include an Early Bronze Age amber necklace and a plano-convex knife (Noble op. cit.). Barrows are much scarcer on the lower ground immediately west of the Pennines; this is perhaps an original distribution but has likely been further skewed by ploughing obscuring archaeological visibility and the presence of Greater Manchester's urban sprawl. The closest comparable features to the Bramhall site lie 2.5km to its south, where ring ditches and a small mound possibly representing a Bronze Age barrow cemetery are visible on aerial photographs near Adlington (Cheshire HER ref. no. 7859). In addition to the surviving earthwork monuments, there are antiquarian records of at least seven Bronze Age funerary urns being unearthed from lower ground in and around Stockport in the 19th century, although few details are known (Arrowsmith 1997, 11–12). Excavated evidence of Bronze Age activity is very rare away from the uplands and the Bramhall site is therefore of some importance, representing as it does evidence of how the Pennine fringe was utilised during the period.

Traces of the settlements of those responsible for the barrows and other monuments of the second and late third millennia BC are very rare, although the best-known Bronze Age settlement site in the region, that at Oversley Farm (excavated in advance of the construction of the second runway at Manchester Airport) lies relatively close by, a little over 8 km to the west (Garner 2001; 2007). Circular structures, pits, hearths and midden deposits found in association with a hollow-way marked a settlement whose heyday lay in the Early Bronze Age, but where occupation is also revealed in the Middle and the Late Bronze Age. The chronology of Oversley Farm therefore suggests it would have been in use during the lifetime of the individual buried at the Bramhall site, and the two would have lain within easy walking distance of each other. Further evidence of Bronze Age settlement has been excavated more recently at Cinder Hill (Cutacre Country Park), where a roundhouse and four-post structures have returned Middle–Late Bronze Age radiocarbon dates (R. Gregory pers. comm. April 2019). This site lies almost 30km north-west of Bramhall, a distance informative of the general rarity of traces of Bronze Age settlement in the area. The Bucklow Hill ring gully site lies 18 km west of the Bramhall site, although no clear evidence of settlement was recorded there (Wessex Archaeology 2017; Daniel, in prep.).

The landscape setting of the Bramhall site merits some mention. Many of the Pennine monuments, such as Shaw Cairn, occupy commanding scarp edge or hilltop positions. By contrast, many of the Bronze Age 'funerary' monuments in lowland Cheshire are situated close to rivers or on the sides of hills or within valleys (Mullin 2003, 19). Although, as noted above, the Bramhall ring gully occupies a minor local highpoint, it does not correspond to either type, sitting as it does within an area of relatively level ground at some distance from obvious watercourses: it lies midway between the Lady Brook (which lies 2 km to the north) and the River Dean (2.5 km to the south), both of which flow westwards to the Mersey. In this instance, it may be that the monument's location relates to the interfluve of these two bodies, rather than a particular river.

Arrowsmith has noted (1997, 11) that, the general distribution of flint and stone tools and weapons within Stockport mirrors the borough's river valleys, although the original pattern of activity is doubtless obscured by urban developments and imperfect reporting. Nevertheless, the finds distribution may reflect the fact river terraces were favoured for prehistoric settlement (*ibid.*)

Occupying land on the watershed, the monument possibly marked a boundary between different social groups based around the watercourses to the north and south. Its position on a broad spur of land descending from the Pennines to the Mersey Basin may also be significant, potentially signalling the nearby existence of a former routeway linking the two. The site at Oversley Farm was described as lying within a landscape 'orientated on a north-east/south-west axis connecting the upland pasture of the Pennines with the lowland pasture of the Cheshire Plain' (Garner 2007, 143) and likely forming a stopping point where such a route between the two forded the River Bollin (*ibid.*). Within this scenario, ring gully 9273 may functioned as a territorial marker, set on land separating two river courses, but also at the point where the lower ground begins to rise toward the Pennines (Fig. 2). The deposition of human remains here in prehistory therefore possibly relates to its status but does not reflect its primary function. This interpretation would accord with the lack of human remains from the ring gully itself, and the small amount of cremated human bone from pit 9191. This was perhaps more a place where the dead *could* be placed, not where they *should* be placed, with the cremated remains possibly deployed as props within ceremonies or negotiations related to claims to the land based on familial bonds. The use of the word 'funerary' to describe this monument has therefore been avoided, and should perhaps be used with caution when discussing other similar monuments.

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Captions

Figure 1: Site location

Figure 2: Excavated remains

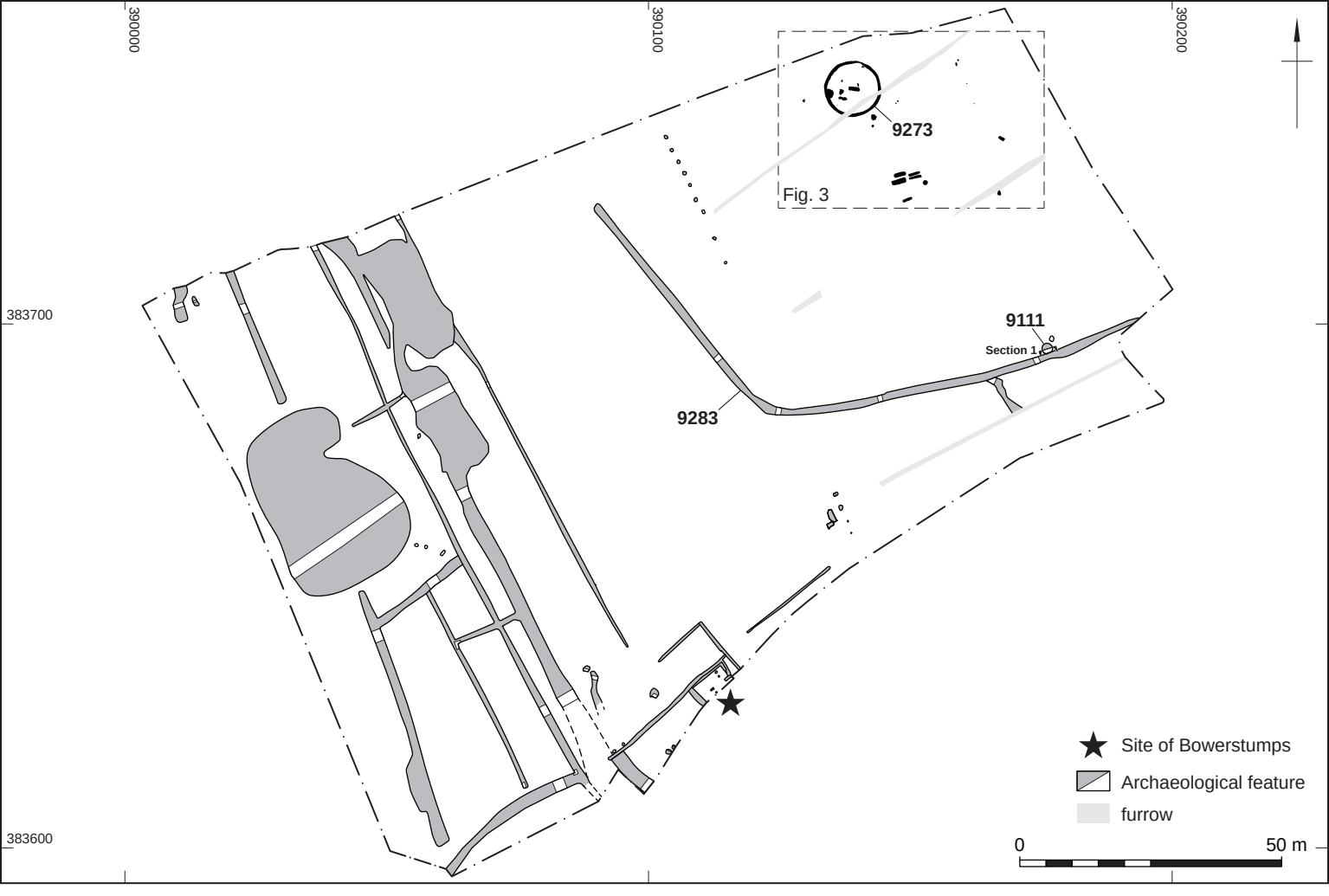
Figure 3: Detail plan of ring gully 9273 and potential mortuary features

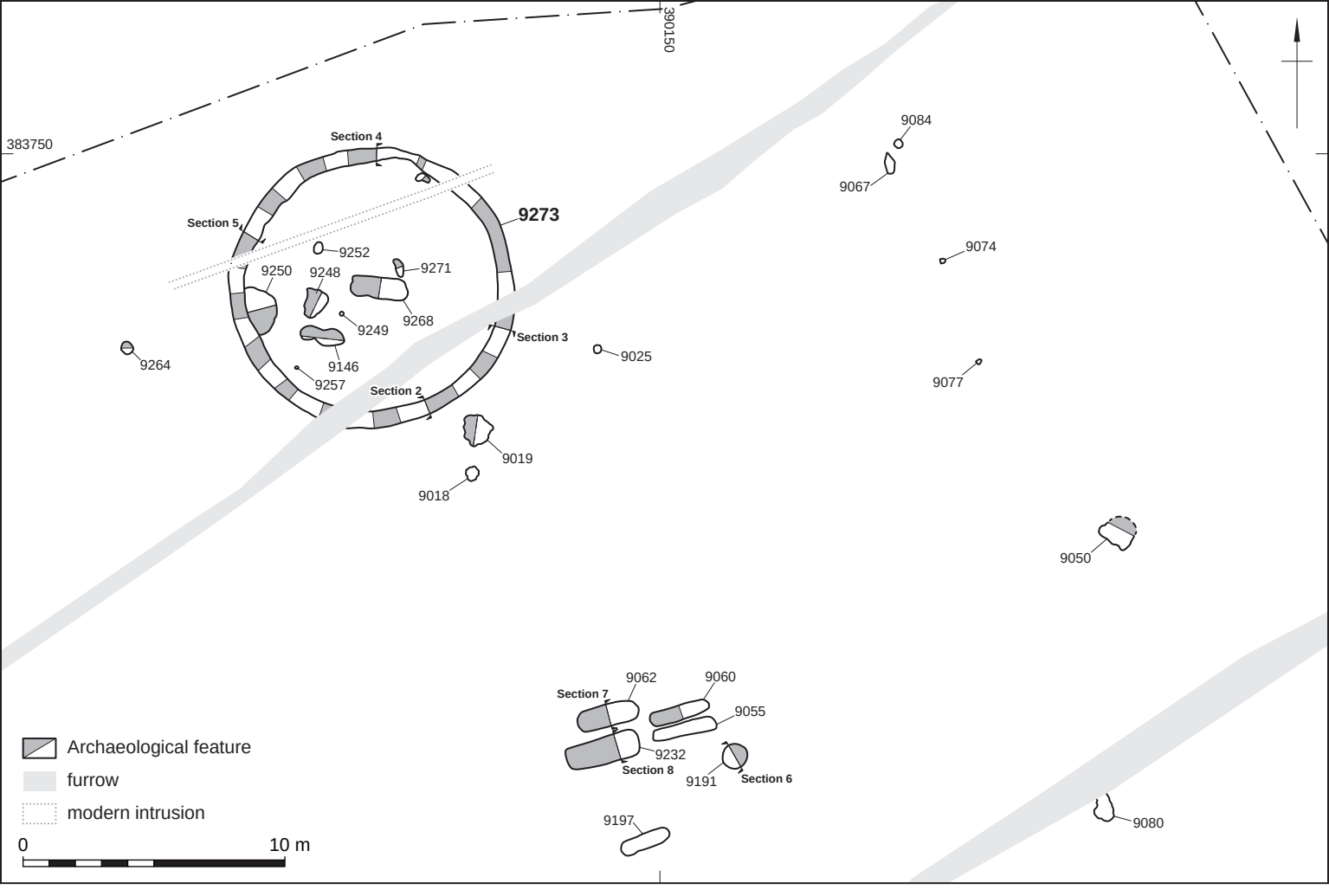
Figure 4: Sections

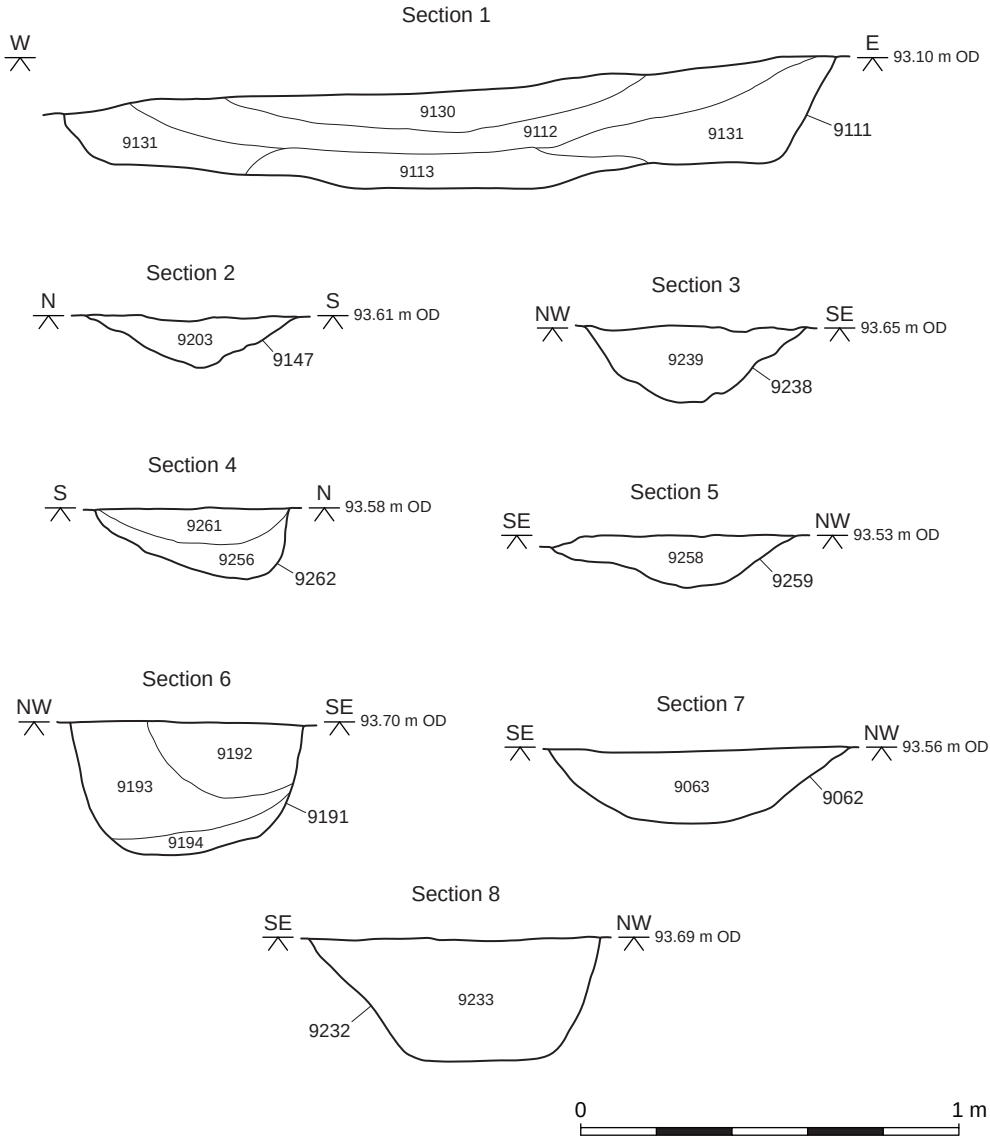
Figure 5: Radiocarbon graph

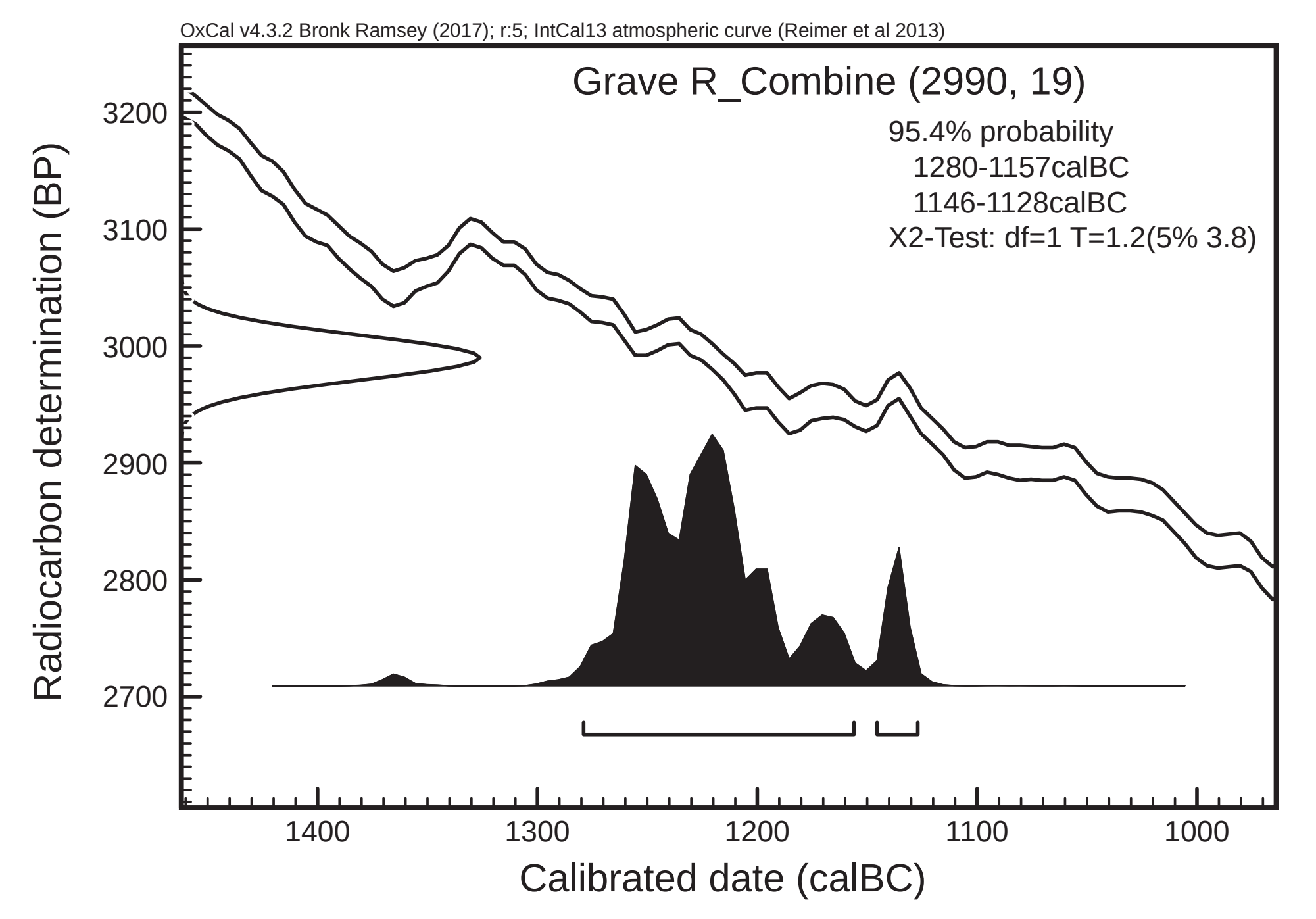
Figure 6: Other sites mentioned in the text

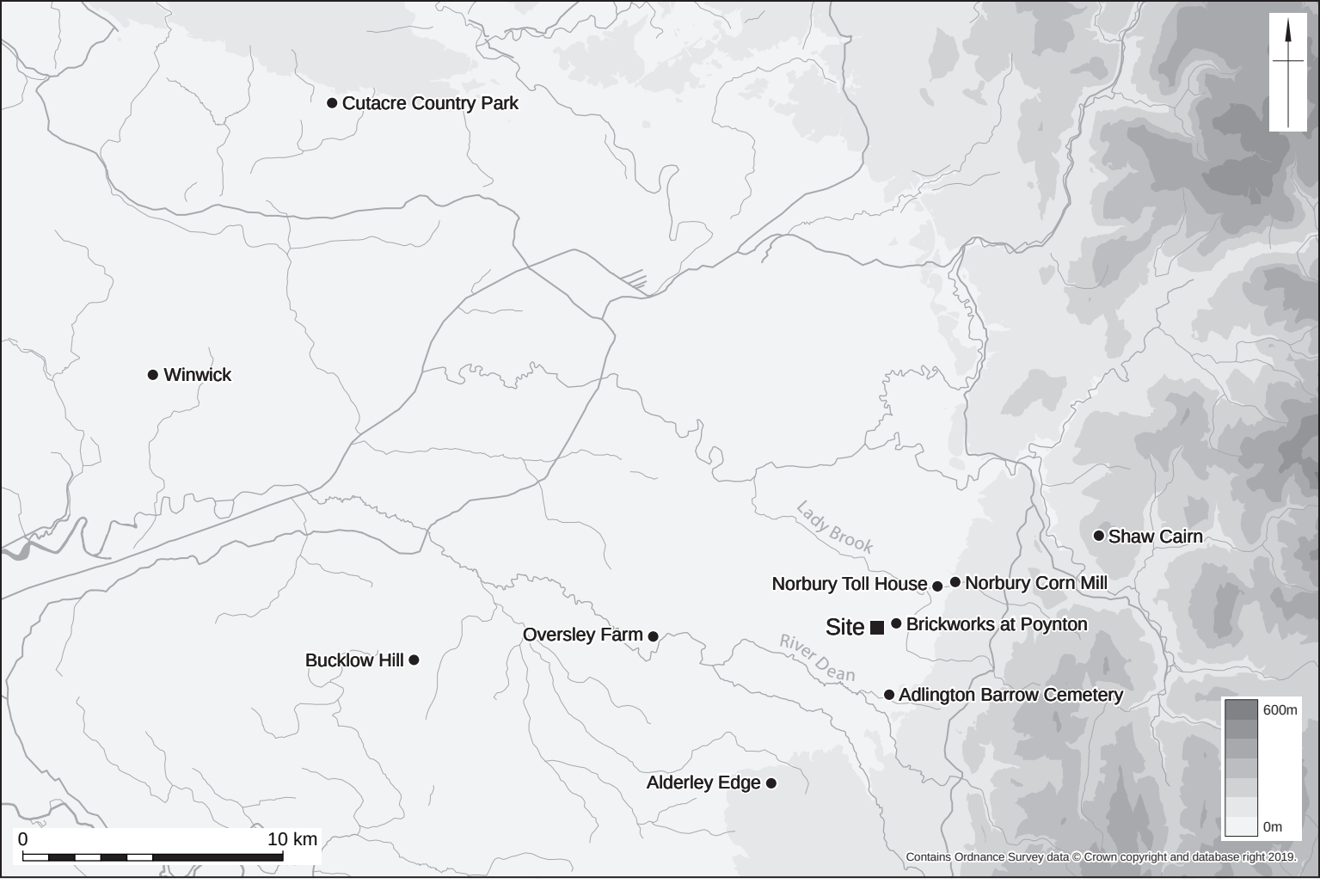

Greater Manchester
Stockport
Site
Cheshire East
390000
385000
Hazel Grove
A5143
Bramhall
Manchester Airport Relief Road
Site
A5102
A34
Poynton
A523
0
2 km
Contains Ordnance Survey data © Crown copyright and database right 2019.


390000
390100
390200
383700
383600
9273
Fig. 3
9111
Section 1
9283
Site of Bowerstumps
Archaeological feature
furrow
0
50 m


390150
383750
Section 4
Section 5
9273
9252
9250
9248
9271
9268
9249
Section 3
9146
9257
Section 2
9264
9025
9019
9018
9084
9067
9074
9077
9050
9062
9060
Section 7
9055
9232
Section 8
9191
Section 6
9197
9080
Archaeological feature
furrow
modern intrusion
0
10 m


Section 1
W
E
93.10 m OD
9130
9131
9112
9131
9111
9113
Section 2
N
S
93.61 m OD
9203
9147
Section 3
NW
SE
93.65 m OD
9239
9238
Section 4
S
N
93.58 m OD
9261
9256
9262
Section 5
SE
NW
93.53 m OD
9258
9259
Section 6
NW
SE
93.70 m OD
9192
9193
9191
9194
Section 7
SE
NW
93.56 m OD
9063
9062
Section 8
SE
NW
93.69 m OD
9233
9232
0
1 m


OxCal v4.3.2 Bronk Ramsey (2017); r:5; IntCal13 atmospheric curve (Reimer et al 2013)
Grave R_Combine (2990, 19)
95.4% probability
1280-1157calBC
1146-1128calBC
X2-Test: df=1 T=1.2(5% 3.8)
Radiocarbon determination (BP)
3200
3100
3000
2900
2800
2700
1400
1300
1200
1100
1000
Calibrated date (calBC)


Cutacre Country Park
Winwick
Lady Brook
Shaw Cairn
Norbury Toll House
Norbury Corn Mill
Site
Brickworks at Poynton
Oversley Farm
River Dean
Bucklow Hill
Adlington Barrow Cemetery
Alderley Edge
600m
0m
0
10 km
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