

# SETTLEMENT ACTIVITY SPANNING THE MESOLITHIC TO IRON AGE BETWEEN RYHALL AND ESSENDINE, RUTLAND

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Groundworks associated with the construction of a new electricity sub-station together with a cable route approximately 800m long linking it to the East Coast Railway mainline, provided an opportunity to explore the archaeology across an upland-lowland landscape in a rural part of Rutland. The excavations revealed settlement activity beginning during the Mesolithic, evidenced by a large assemblage of flint recovered from gravel island(s) in the valley floor and suggestive of temporary encampment(s) overlooking the wetlands. Clusters of pits, post-holes and gully features, both on these gravel islands and on the adjacent, higher southern interfluvium, indicates continuity of settlement through later prehistory. Associated cultural (largely pottery material) and environmental evidence (particularly molluscs, macroscopic plant and charcoal remains) suggest domestic settlement in an open, wooded landscape with areas of grassland; two grains of cereal hint at arable activity. The interpretation of several features on the interfluvium as possible kilns, together with fragments of hammer-scale in one feature and the character of the charcoal assemblages (wood species commonly associated with high-temperature burns), may hint at a level of industrial activity, but this is not conclusively proven.

## INTRODUCTION

On the western side of the Fen basin, major river systems such as the Nene and Welland, which drain the rising ground of the limestone and clayland uplands, have been shown to contain rich archives of cultural and environmental archaeology, indicating that they have been the focus of intense settlement and agriculture, as well as ritual and funerary activity, since at least late prehistory (French *et al.*, 1992; Keevil 1992; Parry 2006). Flowing into these main rivers from the north-west are a number of smaller tributaries, such as the River Gwash and the East and West Glen rivers, which drain along steeply incised, sinuous valleys with relatively narrow floodplains. In contrast to the larger valley floors where development and mineral extraction have provided significant opportunities for archaeological investigation, these smaller river systems, and the interfluvium that divide them, have received less attention.

Trent & Peak Archaeology were commissioned by Jacobs UK Ltd in 2014 to investigate a corridor of land between the villages of Ryhall and Essendine, Rutland (centred on NGR TF 04715 11233), from the floodplain of the West Glen River to its southern interfluvium. The opportunity to investigate the archaeological potential of this largely arable landscape came as a result of National Grid plans to construct a new electricity sub-station over a four-hectare site, together with a cable route approximately 800m long – linking it to the East Coast Railway mainline infrastructure near Essendine. An initial desk-based assessment (DBA) (Hyder 2013) and subsequent geophysical survey (ASYWAS 2013) indicated a number of anomalies around the site that were interpreted as evidence for post-medieval agricultural activity, modern activity and natural geological variation. However, a single linear anomaly was interpreted as archaeological (ASYWAS 2013). On the basis of this evidence the Principal Planning Archaeologist for Leicestershire commissioned further investigations. The ensuing evaluations of both the sub-station site and cable route, undertaken by Trent & Peak Archaeology (TPA) in 2014, revealed archaeological evidence spanning the Mesolithic to Iron Age, including lithic, ceramic and environmental remains (Dodd 2014; Parker and Davies 2014). Evidence of unenclosed prehistoric settlement with good associated artefact assemblages is rare within the East Midlands (Knight *et al.* 2012) and the site was deemed to be of regional importance. Therefore, TPA was commissioned to carry



Fig. 1 Partially excavated oval pit.

out further investigations of the development. This paper provides an overview of the results of these combined investigations to provide a narrative of the prehistoric archaeology and human activity along this transect of upland and lowland landscape.

Radiocarbon dating was used to date the main feature groups and establish a site chronology. In total, six samples were submitted to the Scottish Universities Environmental Research Centre (SUERC) and unless otherwise noted, all age estimates are quoted at the 95.4 per cent confidence level.

The site archive was assembled in accordance with the guidelines set out in Planning Policy note 3 (English Heritage 2008) and by Rutland County Museum (Rutland Museum 2013).

## TOPOGRAPHY AND GEOLOGY

The sub-station site is situated on arable land on the southern interfluvium of the West Glen River valley (approximately 37m AOD); it is bounded to the north-east by Essendine Lane, to the south-east by a disused railway line and to the west by open farmland. The cable route comprised an S-shaped corridor approximately 15m wide and 800m long, declining in altitude from approximately 36m AOD (in the south) and 20m AOD (in the north).

The underlying solid geology of the area comprises a mixture of near horizontally bedded limestones, mudstones, siltstones and sandstones of Jurassic age. Within the immediate area of the transect the interfluvium is notably devoid of superficial sediments, except for a small patch of glacial till marginally east of the sub-station site. In contrast, the valley floor of the West Glen River is covered by a veneer of fine-grained alluvium with undifferentiated river terrace sediments mapped along its margins. Several palaeochannels were visible on the contemporary floodplain and a number were also inspected in cross-section during excavation (Stein 2015). The position of at least two may have shaped the settlement activity on the valley floor from at least the Mesolithic period. Whilst no colluvial or periglacial deposits are recorded by the British Geological Survey, colluvial sediments containing artefactual material were recorded on the slopes during geoarchaeological survey, and were shown to be sealing possible buried soil horizons that were rich in charcoal (Stein 2015).

## EXCAVATIONS AT THE SUB-STATION SITE

Excavation was undertaken on two areas (1 and 2), both of which contained a moderate density of archaeological features. Whilst the areas were excavated separately, the character of the archaeology was similar and comprised a number of prehistoric and undated features divided in each area into five discrete groups (Fig. 1). The features were characterised by pottery-rich pit clusters adjacent to ephemeral groups of post-holes, though no ditched boundaries were observed. A number of the features were also charcoal-ric.



Fig. 2. Northeast facing section of kiln feature.

### Chronology

Radiocarbon dating of charcoal from two features in Area 1, and charcoal and grain from four features in Area 2, suggested a chronological emphasis spanning the Neolithic to Late Bronze Age/Early Iron Age (Table 1). However, not all dating was consistent with artefactual evidence recovered from the features. Within Area 2, more than a kilogram of probable Early Iron Age pottery was recovered from one feature [0022], whereas the radiocarbon analysis suggested a Neolithic date and might suggest residuality of older charcoal. A single date of seventh–eighth century AD activity was also recorded, but again this dated material [0257] was found in association with a prehistoric flint flake, suggesting a degree of ambiguity. The near infinite age estimate on the indeterminate grain fragment from Area 2 [0034] is clearly erroneous.

### Environmental evidence

Thirty-two bulk environmental samples were taken from a range of features including pits, post-holes, ditches and possible kilns, with the majority considered to be Late Bronze Age to Early Iron Age – primarily on the basis of ceramic evidence. The processed samples contained few botanical remains, although two poorly

(Feature) – Interpretation-[context]	Material dated	Radiocarbon age (ka BP) and Lab code	Calibrated age (2 sigma)
<b>Area 1</b>			
(0221) – Fill of possible kiln [0212]	Charcoal: Indet.	3551 ± 30 SUERC-55849 (GU35253)	2009–1772 Cal BC
(0170) – Fill of possible kiln [0163]	Charcoal: Indet.	4768 ± 31 SUERC-55850 (GU35254)	3641–3384 Cal BC
<b>Area 2</b>			
(0326) – Fill of curvilinear ditch [0034]	Grain: Indet.	42611 ± 1025 SUERC-55854 (GU35255)	46592–42316 Cal BC
(0328) – Fill of oval pit [0324]	Charcoal: Indet.	2755 ± 30 SUERC-55855 (GU35256)	978–827 Cal BC
(0312) – Fill of oval pit [0257]	Charcoal: Indet.	1311 ± 29 SUERC-55856 (GU35257)	656–769 Cal AD
(0023) – Fill of oval pit [0022]	Charcoal: Indet.	4971 ± 29 SUERC-55857 (GU35258)	3894–3661 Cal BC

Table 1. Results of radiocarbon dating of features at the sub-station site.

preserved carbonised cereal grains were recovered, both from a curvilinear ditch feature (Group 4, Area 2). Charcoal was also recorded in a number of features where *in situ* burning had occurred; the taxa were limited (hazel, cherry type, apple type, oak) and probably reflect exploitation of local woodland resources.

The samples contained a large, diverse assemblage of terrestrial and freshwater molluscs. The terrestrial species indicate that the local contemporary environment was generally well vegetated, but with open woodland interspersed with areas of grassland. Species indicative of wetter conditions, waterlogged areas or marshland were present, although given that the limestone bedrock would be relatively free-draining, these species may have lived in ditches. A number of species are synanthropic, thriving in man-made habitats including hedgerows, gardens and areas of waste deposition (Evans 1972).

Seven pieces of poorly preserved animal bone (a mixture of bovine teeth and burnt fragments) were also recovered from two features ([0300] and [0324], both in Area 2), but apart from implying some domestic activity they were of limited interpretative value.

Artefactual evidence was also recovered during processing, notably burnt clay fragments from a significant number of pits, and small fragments of hammerscale from one context (0077) in Trench 3 of the Sub-station evaluation, Area 2 of the excavation.

### Prehistoric pottery

In total, 497 sherds were collected from seven excavated features, though the majority of the assemblage was recovered from just three of these: pit [0022], pit [0068] and ditch [0300]. The pottery was in poor condition, being highly fragmented and abraded. It included rims from 15 vessels, mostly dating to the Later Bronze Age or earlier Iron Age; one unstratified rim sherd was probably later Iron Age in date. The assemblage was entirely shell tempered and two broad (shelly) fabric groups were identified: those with fine, regularly sized shell pieces; and those with coarser, more unevenly sized, inclusions. The variation in inclusion size and frequency most probably reflects the sieving of material as part of clay preparation. A third, sandier fabric with shell inclusions was also present in small quantities.

### Lithics

A total of five flint artefacts were recovered, all most probably sourced from local river gravels. Two were recovered as unstratified surface finds, whilst three were from excavated features. The latter group comprised a heavily burnt, medial/distal bladelet fragment; a flake with retouching along the convex distal edge and interpreted as a possible knife; and a rectangular distal fragment with retouching along the distal and lateral edges, interpreted as a possible axe fragment. The only chronologically diagnostic artefact was a barbed and tanged arrowhead of Conygar Hill type, which were commonly used during the Late Neolithic and Bronze Age and are frequently found throughout the British Isles (Edmonds, 2005, 162). However, this piece was unstratified. With the exception of the arrowhead, the remainder of the assemblage spans the breadth of post-glacial prehistory.

### General discussion (sub-station site)

The features comprised a mixture of pottery-rich pit clusters, ephemeral groups of post-holes and gullies. A number of the features (e.g. Group 1, Area 1) are curvilinear or even circular in alignment, and are suggestive of later prehistoric structures. Together with other nearby pits, these may have formed a foci of settlement activity. A second foci of activity was identified by Group 1 (Area 2) comprising an enigmatic structure with several discrete pits. Therefore, the impression is of two distinct activity foci within an area of less densely occupied habitation.

Radiocarbon dating of charcoal and charred grain from selected features suggests a predominance of Late Bronze Age and Early Iron Age habitation, a chronology supported by the majority of pottery evidence, with material comparable with sites such as Billingham (Chowne *et al.* 2001). The exclusive use of shell-tempered fabrics at the site compares well with other Post Deverel-Rimbury sites from the region such as Empingham, Rutland (Cooper 2000, 67), and Market Deeping and Langtoft, Lincolnshire (Knight 2001, 261; Knight *et al.* 2010, 247).

However, radiocarbon dating does suggest that activity may extend back into the Early Bronze Age and Neolithic. The earlier dating evidence is associated with possible kilns [0163] and [0212], and a pit [0022] in Area 1 Fig. 2), though this

latter feature also contained significant pottery attributable to post-Deverel-Rimbury Plain Ware and suggests some residuality of charcoal in dated samples. Residuality is also implied by the relatively small amount of charcoal recovered from probable kiln features, far less than might be expected from well-preserved examples. Further tentative evidence for Neolithic activity was provided by the fragment of a flint axe ([0300], Area 2), but this too was found with a large quantity of Late Bronze Age/Early Iron Age pottery. The sherds were fragmented and abraded, suggesting that it is unlikely that they were in a primary context, perhaps forming part of earlier midden before being dumped in the pit. Midden waste may also explain the source of the unidentified fish otolith recovered from the same pit fill; clearly there are taphonomic issues with the integrity of these samples. The concentration of pottery within the fills of a limited number of features is noted on many contemporary sites, the uneven distribution perhaps resulting from infilling of some pits or similar surface irregularities with material derived from surface deposits containing household debris (Brudenell 2012, 311). Although unstratified, the Conygar Hill type flint arrowhead is commonly found during the period 2500 to 1500 BC (Butler 2005, 162).

The environmental evidence provided by plant remains, including charred material, is limited. Two poorly preserved carbonised cereal grains were recovered from the curvilinear ditch (Group 4, Area 2) and hints at crop processing. Likewise, a small poorly preserved assemblage of bovine teeth and burnt faunal remains hints at some domestic activity. The small size of most of the pottery sherds prohibited exact identification of most vessel forms and hence can provide little in the way of clues to activity. The very limited assemblage of flint artefacts suggest that the bulk of flint knapping and usage activities were occurring elsewhere.

The most significant evidence for the environment is provided by mollusc remains, which suggest a mosaic of grassland and (limited) woodland. A number of species were synanthropic, thriving in man-made habitats including hedgerows, gardens and areas of waste deposition (Evans 1972). Species associated with wetter environments were also recorded, but on free-draining limestone this might reflect assemblages living in ditches and other lower-lying hollows.

Three possible kilns/ovens were identified with each yielding notable volumes of charcoal. Together with a curved gully, which may also have defined a working area, there is the suggestion that specialised activities may have been undertaken on the site. One of the pits [0257] in Area 2 contained a relatively rich charcoal assemblage of oak, a taxa that is commonly used for activities that require prolonged burning at very high temperatures such as metalworking/smelting (Tylecote 1962; Dickson and Dickson 2000). Artefactual evidence tentatively supports the environmental evidence. Burnt clay fragments were recovered from many of the pits and may reflect the linings of kilns or ovens, or daub from another type of structure. Small fragments of hammerscale were also recovered from context (0077), Trench 3 (later covered by Area 2 of the excavation), and although this may be residual it could suggest smithing was conducted on a small scale (although no other metalworking evidence was noted on the site).

An alternative hypothesis is that oak is a strong timber favoured for structural support during building, and the presence of charcoal may also reflect conflagration or demolition. Hazel, cherry type and apple type charcoal could reflect the remnants of structural wattle panelling or kindling for domestic as well as industrial fuel.

## EXCAVATIONS ALONG THE CABLE CORRIDOR

Two areas of strip, map and sample excavations were also carried out north of the sub-station on the 2km long cable route. Unfortunately, these areas were also defined as 1 to the south (965m<sup>2</sup>) and 2 to the north (1,773m<sup>2</sup>), but this nomenclature is retained in order to provide clarity for anyone using the site archive in the future.

To the south, on high land nearest to the earlier sub-station excavations, further Late Bronze Age to Early Iron Age settlement remains in the form of scattered pits and occasional ditches were revealed. Datable by significant quantities of pottery, these features appear to represent the northern extent of a reasonably extensive area of unenclosed prehistoric occupation. To the north, located between two palaeochannels on the valley floor of the West Glen River, a total of 424 worked flints were recovered from two distinct scatters (Fig. 3). There was a remarkably low percentage of tools represented within the assemblage. Much of the assemblage comprised flint debitage, demonstrating low-quality knapping techniques with frequent mis-hits, re-use of previously discarded pieces and few examples of typically earlier platform preparation or blade production, suggesting a later prehistoric (probably Bronze Age/Iron Age) date. However, the presence of occasional Mesolithic microliths (including an isosceles triangle, a truncated point and a probable *meche de foret* (drill-bit)) indicates that we are actually looking at evidence for knapping in the wider area over a longer period of time, with worked flints transported from the point of manufacture to their present findspots via natural processes, as opposed to scatters that represent discrete *in-situ* knapping events.

### Area 1

This archaeology was characterised by pit and post-hole type features that were concentrated within the north-eastern portion of the area. A number may have been packed with limestone fragments. Pit [1149] was oval in plan and may represent a waterhole. Several linear probable boundary ditches were observed towards the periphery of the excavated area.

### Area 2

During the topsoil and subsoil stripping of Area 2, a considerable number of worked flints were identified at the interface between the subsoil and underlying fine-grained alluvium. The flints were found in a relatively low density across the entire area where the alluvium was revealed, and were entirely absent from the surface of the late Pleistocene gravel terrace towards the south of the area. The greatest density of flint was located at the northern end of the area within the alluvial deposits, situated





Fig. 3. Grid sampling of a flint scatter area.

either side of a patch of gravel, which perhaps represents a small island or higher gravel bar in the former floodplain.

### Environmental analyses

Of 29 samples recovered from a variety of features and deposits, including [0077] within Trench 3 and several features within Area 1 and Area 2, 22 were selected for detailed further analysis.

Few artefacts were recovered from any of the samples, with the most notable being magnetic material, either natural iron stone or magnetised sediments as a result of exposure to intense heat. Burnt clay fragments were also occasionally present. This may have derived from the hearth area within domestic structures. In contrast to the sub-station site, no evidence for structural remodelling or definitive

industrial processes was recovered. Other components included flint/chert flakes, which were abundant within the flint scatter samples, layer (2067) and ditch fill (2064) within Area 2, and may reflect natural or anthropogenic fracturing of this material.

Carbonised botanical remains of all kinds were scarce, including charcoal within features described as fire pits ([2003] and [2029]). Charcoal analysis does not indicate reliance on any single taxon across the site as a whole, with the exception of the pond/watering hole feature [1074] in Area 1 and the layer within grid 1 of Area 2, both of which were predominantly oak, albeit only in small quantities. Reasons for the preferential use of oak have been discussed previously for the sub-station site, although it should be noted that oak is easier to identify in very small fragments than many other taxa, such that this bias may be an artefact of poor preservation rather than higher usage.

Two fragments of yew charcoal were recorded in pit [2037]. This timber is generally durable and is recorded most frequently on calcareous soils (Gale and Cutler 2000). The high tensile strength and flexibility of the wood rendered it valuable for many utilitarian uses, but especially for longbows. The presence of it here may be debris from woodworking or incidental, as part of the wider site assemblage of general waste disposal.

Most of the features did not contain carbonised cereals or seeds of commonly associated cereal crop weeds, but in those that did, grains were too rare to be of significant interpretative value. Nevertheless, their presence does imply cereal processing activities within the vicinity. The waste of cereals would have been avoided as much as possible, and the deposits may not reflect the actual availability of such food items or the scale of processing (Monckton 2002).

Hazel nutshells are commonly recovered from archaeological sites of many periods ranging from the Mesolithic to the historic periods; they are thought to have been one of the most important plant foods before the introduction of cereal cultivation (Dickson and Dickson 2000). Hazelnut shell fragments were recovered from fire pit [2003]. The shell is the unwanted waste product of consumption, which would either be deliberately discarded, often onto domestic fires, or may even have been used as kindling. It has also been suggested that the presence of hazel nutshells in pits is the result of storage of the food product for consumption at a later date (Monckton 2002), although in such instances entire nuts and/or naturally fractured shells from nuts that had germinated might be expected, rather than smashed carbonised fragments.

Few terrestrial molluscs were recovered from the Area 1 samples, which may be a result of adverse preservation conditions rather than a complete absence of individuals. Many of the molluscs recorded were of taxa that are particularly prevalent within damp, shaded environments, particularly hedgerows and woodland. This suggests strongly that the local environmental conditions included damp scrub woodland. Synanthropic species were also recorded.

The majority of the animal bone recovered was from pits, and comprised a mixture of medium to large mammal fragments, unidentified small fragments and calcined and non-burnt material, all of which reflects general waste disposal.

Identified species were mostly common domesticates such as cattle and sheep, with the addition of a rodent in one sample.

### Pottery

In total, 275 sherds of pottery were collected from 27 excavated features (over 60 per cent from pits) and from an unstratified surface collection; the latter less than 1 per cent of the total assemblage. The pottery is in poor condition, being mostly small, fragmented and abraded. Taken as a whole, the assemblage was dated by form to the Later Bronze Age and Iron Age. At least part of the mid to later Iron Age assemblage (*c.*350–100 BC) may be contemporary with pottery found in the palaeochannel at Outgang Road, Market Deeping (Knight 2010). In keeping with the pottery found at the sub-station site, the majority of the assemblage is shell tempered and similar in character. The assemblage is dominated by ovoid jars which have direct rounded rims, a change of angle at the neck and rounded girths; they are akin to those found previously at the site and to examples identified from Market Deeping dating to the fifth to third centuries BC (Knight 2002; Knight 2010). One thick-walled vessel had a flattened, T-shaped rim and concave neck, and may be a storage jar (see Knight 2010, 108, fig. 142). Several sherds showed scored decoration typical of the Iron Age. Limescale deposits were noted on 14 sherds and two have sooting or burnt food residues.

### Lithics

The lithic assemblage comprised 424 pieces, with the majority recovered from two scatters at the subsoil-alluvium interface in the northern part of the Area 2 excavation. The lithic evidence indicates likely Mesolithic and Early Neolithic use of the area, whilst ceramic evidence from nearby features date to the Iron Age – suggesting multi-period occupation of the site.

The assemblage comprised 412 pieces of worked flint and 12 pieces of worked chert. The material recovered shows that all stages of lithic chipped stone tool production was carried out at the site, although debitage indicates that it was predominantly the later stages of production, particularly tool finishing and maintenance. At the time of excavation it was suspected that the two large scatters could represent *in-situ* knapping floors. Whilst tools and utilised pieces could easily have been dumped on top of a knapping floor, and similarly the presence of a small number of burnt pieces could be explained in the same way, the multi-period nature of the tools and lack of re-fitting pieces make it unlikely that the scatters represent *in-situ* knapping debris, but rather dumps of material resulting from multiple knapping episodes. Ethnographic evidence suggests that less than 1 per cent of debris was discarded within habitation areas (Schofield 1991, 117), whilst small-scale activity was carried out around hearths (Binford 2002). The nature of the tools recovered indicates that domestic activity was taking place on the site, with tools related to hunting also being produced or repaired. The large amount of debitage would suggest that it was more than a hunting-camp, and likely a more long-term settlement.

The flint retained a significant amount of dorsal cortex suggestive of nodule deposits, likely to be derived from weathered bedrock chalk (Clay-with-Flints Formation). The remaining material is derived from local river gravels. Debitage comprises a total of 275 pieces, composed of blades, blade fragments, core rejuvenation flakes, flakes, scraper rejuvenation flakes and shatter fragments. The presence of crested blades within the debitage would indicate specific blade core production and three pieces suggest possible microlith preparation, a uniquely Mesolithic activity.

### Discussion

The excavations undertaken along the cable trench corridor revealed two main phases of archaeological activity, located within three discrete areas. The first was evidenced by a multi-phase deposit of worked flint on the valley floor that appears to have been principally created during the Mesolithic and Neolithic. The second phase was evidenced by two areas of mid- to late Iron Age activity, one positioned alongside the floodplain flint scatter, and the other on the southern interfluvium closer to the sub-station site.

The flint scatter is not considered to be part of an *in-situ* knapping site, but is more likely to be waste material discarded away from the working areas. More generally, evidence of Mesolithic activity in Rutland has been limited almost entirely to lithic scatters, and whilst early Mesolithic sites are recorded – for example, at Oakham (Healy 1998) – later Mesolithic sites are more common for example, at Leighfield (Clay, 2002, 27). Some of these, such as at Oakham, are large enough to reflect settlement and are within a 20km radius to the south-west of the cable route scatter; this would fit with models of hunter-gather movement and food procurement strategies (Mellars 1976) between uplands and lowlands, as demonstrated by sites such as Starr Carr (Milner *et al.* 2013). A similar pattern can be seen for the Early Neolithic, though the increased sedentism of this period may indicate that the Mesolithic settlements and camps had become distinct entities. By the later Neolithic and Early Bronze Age, lithic evidence of human activity was declining, but ceramic material dating to the later Neolithic through the Iron Age indicates that settlement activities continued to thrive.

The middle to late Iron Age within Area 1 on the southern interfluvium was represented by a moderate density of pits and post-holes, suggesting an area of settlement which may have begun in the fourth–fifth centuries BC and potentially continued until the end of the second century BC. The artefactual and environmental evidence, though limited, points to mainly domestic settlement activities. Throughout, the numerous environmental samples were the charred remains of cherry, apple and oak, though whether this provides evidence for domestic or industrial activities must remain a point of speculation. Evidence for cereal processing was also present, albeit in relatively low quantities.

Further Iron Age activity was recorded within Area 2, where similar sherds of scored pottery indicated that it was broadly contemporary with the evidence in Area 1, probably dating to c.350–100 BC, though perhaps not settled at precisely the same time. Within Area 2 the features were less densely observed and were typically

in the form of large bell-shaped pits. The environmental remains did not provide sufficient evidence to help determine the purpose of these pits, but it is likely that they were used for storage. Combined with the presence of slag within pit [2037], it may be that there was a slightly more industrial role to the activity within the valley bottom during this period.

## CONCLUSIONS

The construction of a new electricity sub-station and associated cable route, between Ryhall and Essendine, provided an insight into prehistoric settlement and human activity in a hitherto rarely explored rural landscape from the southern interfluvium of the West Glen River to its valley floor. Lithic evidence demonstrated human occupation on the valley floor from the Mesolithic through the early Neolithic, with ceramic evidence indicating that occupation continued into the mid- to late Iron Age. The lithic material indicates that the Mesolithic occupation is unlikely to have been associated with prolonged settlement, but may have been temporary encampments used on multiple occasions as part of a wider model of movement associated with food procurement. The mid- to late Iron Age activity is conversely more domestic in nature.

On the higher ground of the interfluviums the mid- to late Iron Age activity is also associated with more permanent, domestic settlement, including limited evidence for the processing of meat and cereals. The identification of three potential kiln/hearth structures, charcoal attributable to oak (a fuel commonly used to secure prolonged, high-temperature burns) and hammerscale in one feature, hints at industrial activity, though this cannot be attributed to metal working with a great degree of confidence. This study demonstrates that whilst the villages of Essendine and Ryhall are established in the Domesday Book, the history of human activity and settlement in the area extends back to around 8,000 years earlier.

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## BIBLIOGRAPHY

- ASWYAS, 2013 *East Coast Mainline Electrification – New 400kV Substation, Ryhall, Rutland; Geophysical Survey Report*. Morley: Unpublished ASWYAS Report 2476.
- Binford, L., 2002 *In Pursuit of the Past: Decoding the Archaeological Record* University of California Press.
- Brudenell, M., 2012 *Pots, practice and society: an investigation of pattern and variability in the post-Deverel Rimbury ceramic tradition of East Anglia*. Unpublished Ph.D. thesis, University of York.

- Butler, C., 2005 *Prehistoric Flintwork*. Stroud: The History Press.
- Chowne, P.,  
Cleal, R. M. J. and  
Fitzpatrick, A. P. with  
Andrews, P., 2001 *Excavations at Billingborough, Lincolnshire, 1975–8: a Bronze-Iron Age Settlement and Salt-working Site*. East Anglian Archaeology 94.
- Clay, P., 2002 *The prehistory of the East Midlands Claylands: aspects of settlement and land-use from the Mesolithic to the Iron Age in central England*. Leicester: Leicester Archaeology Monograph No. 9.
- Cooper, N. J., 2000 *The Archaeology of Rutland Water*. Leicester: Leicester Archaeology Monograph No. 6.
- Dickson, C. A. and  
Dickson, J. H., 2000 *Plants and People in Ancient Scotland*. Stroud: Tempus.
- Evans, J. G., 1972 *Landsnails in Archaeology, with special reference to the British Isles*. London and New York: Seminar Press.
- Edmonds, M., 2005 *Stone tools and society: working stone in Neolithic and Bronze Age Britain*. Abingdon: Routledge.
- French, C. A. I.,  
Macklin, M. G. and  
Passmore, D. G., 1992 *Archaeology and palaeochannels in the Lower Welland and Nene valleys: alluvial archaeology at the fen-edge, Eastern England*. In S. P. Needham and M. G. Macklin (eds). *Archaeology under Alluvium*. Oxford: Oxbow Monograph 27, 169–76.
- Gale, R. and  
Cutler, D. F., 2000 *Plants in Archaeology Identification Manual of Artefacts of plant origin from Europe and the Mediterranean*. Kew: Westbury Scientific Publishing & Royal Botanic Gardens.
- Healey, E., 1998 ‘Lithic material’ in Clay 1998, 309–17 (Clay, P., 1998 ‘Neolithic/Early Bronze Age Pit Circles and their Environs at Burley Rd, Oakham, Rutland’, *Proceedings of the Prehistoric Society* 64, 293–330).
- Keevill, G. D., 1992 ‘Life on the edge: archaeology and alluvium at Redland’s Farm, Stanwick, Northants’, in S. P. Needham and M. G. Macklin (eds), *Archaeology under Alluvium*. Oxford: Oxbow Monograph 27, 177–84.
- Knight, D., 2001 ‘Iron Age Pottery’ in T. Lane and E. L. Morris (eds), *A Millennium of Saltmaking: Prehistoric and Romano-British Salt Production in the Fenland*. Heckington: Lincolnshire Archaeology and Heritage Reports Series No. 4, 261–62.
- Knight, D., 2002 ‘The Humber and the Nene’ in A. Woodward and J. D. Hill, (eds), *Prehistoric Britain: the Ceramic Basis*. Oxford: Oxbow Books.
- Knight, D., 2010 *Human Adaptation: Human Adaptations on Prehistoric Sites on the Lincolnshire Fen Edge 1991–1994*. Heckington: Lincolnshire Archaeology and Heritage Reports Series 9.
- Knight, D., Vyner, B.  
and Allen, C., 2012 *East Midlands Heritage. An updated research agenda and strategy for the Historic Environment of the East Midlands*. University of Nottingham and York: Trent & Peak Archaeology.
- Mellars, P., 1976 ‘Settlement patterns and industrial variability in the British Mesolithic’, in G. Sieveking, I. Longworth and K. Wilson (eds), *Problems in Economic and Social Archaeology*. London: Duckworth, 375–99.
- Milner, N., Taylor, B.,  
Conneller, C. and  
Schadla-Hall, R. T., 2013 *Star Carr: Life in Britain after the Ice Age*. York: Council for British Archaeology.

- Monckton, A., 2002 *Later Prehistoric Features, a Bronze Age Burnt Mound and Saxon Features at Willow Farm, Castle Donington, Leicestershire (XA14.1997)*. Unpublished report. Leicester: University of Leicester Archaeological Services.
- Parker, R., Davies, G. and Dodd, M., 2015 *Final Report on an Archaeological Strip, Plan and Record Excavation at Ryhall Substation, Rutland*. Unpublished report for Jacobs UK Ltd, Number 018/2015. Nottingham: Trent & Peak Archaeology.
- Parry, S. J., 2006 *Raunds Area Survey: An Archaeological Study of the Landscape of Raunds, Northamptonshire 1985–94*. Oxford: Oxbow books.
- Schofield, A., 1991 'Artefact distributions as activity areas. Examples from South-east Hampshire', in A. Schofield (ed.) *Interpreting artefact scatters: Contributions to ploughzone archaeology*. Oxford: Oxbow Monograph 4, 117–28.
- Stein, S., 2015 *Ryhall Substation, Cable Route, Rutland: Geoarchaeological Assessment*. Nottingham: Trent & Peak Archaeology Report No. 003/2015. Nottingham: Trent & Peak Archaeology.
- Tylecote, R. F., 1962 *Metallurgy in Archaeology*. London: Arnold.