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Monuments and landscapes in the Neolithic and Bronze Age

by Alison Deegan

Introduction

The extensive and detailed NMP dataset can contribute to a meaningful narrative for the broad trends in monument building in Northamptonshire between the beginning of the 4th and the end of the 2nd millennia BC. This, however, cannot be achieved with NMP data alone; cropmarks, soilmarks and earthworks are essentially undateable, yet chronology is the essential framework to this study. The project's data have therefore been integrated with the broad range of archaeological, geological and topographical data available in the Northamptonshire SMR.

Much of what is known of the Neolithic and Bronze Age in Northamptonshire has been acquired through excavations, often under difficult rescue conditions, at gravel extraction sites such as Aldwincle, Earls Barton and Grendon or in advance of development, as at Briar Hill (Jackson 1976a, 1984; Bamford 1985; Gibson and McCormick 1985). Then, between 1985 and 1993, an extensive area of the Nene Valley was investigated in the Raunds Area Project (RAP) with geophysical survey, field walking and small to large scale excavations in advance of gravel extraction and road and housing construction, providing a 40km² sample of the middle Nene Valley and the interfluve between the Nene and the Ouse to the south-east (Harding and Healy 2007, 1). More than 20 Neolithic and early Bronze Age monuments, many previously unsuspected, were uncovered at Stanwick and West Cotton. Together these works provide both the springboard and framework for the analysis of the cropmark, soilmark and earthwork sites mapped by the Northamptonshire NMP project.

Surprisingly, the contribution of work required through the planning process has been limited. With the notable exception of the published works on the Tansor mounds and the Bronze Age burials at Irchester Quarry and Brackmills Link Road

(Chapman 1997, 2003), the pertinent results are difficult to extract from the burgeoning weight of client reports, interim statements and research designs. This situation is further complicated because investigations are frequently disciplinary, employing geophysical survey and other specialist services, and the excavation stage of a single site may be in the hands of several different archaeological contractors. However, an extensive trawl in October 2002 of the grey literature then held in the SMR, suggests that Neolithic and Bronze Age monuments had received relatively little intrusive attention in recent years.

Neolithic and Bronze Age studies in the county have also benefited from extensive field-walking by D Hall and P Martin (Hall 1985), who have made available those results currently available in a digital format. At the time of writing these had not been integrated into the county SMR, so in order to create a comprehensive dataset of artefactual evidence Hall's data were combined with the results published in 1985 (Hall 1985, table 1) and the SMR records for the periods, excluding those derived from aerial photography. Hall (1985, 30) suggests that lithic scatters of fewer than 20 flints may give a misleading impression of activity on small scale maps, but it has not been possible to exclude these smaller sites from the data used here. Neither has it been possible to correct for repeated collection at some sites, compared to the single visits made at others (Hall 1985, 34-5). Although this dataset cannot be said to be consistent for the whole county - the uneven application of field collection techniques alone predicate against this by concentrating on the presence of material, rather than on absence or quantity, the data do provide an adequate sample for investigating broad trends.

The record for the prevailing environment of Neolithic and Bronze Age Northamptonshire is scant, although informative work has been published for the Nene Valley and is forthcoming from the Raunds project area (Robinson 1992; Brown and Meadows 1998; Campbell and Robinson 2007).

From neighbouring counties there are several published research projects that are significant to the analysis of the Northamptonshire data (Fig 4.1). In particular the multi-disciplinary investigations at the Etton and Maxey complex in Cambridgeshire, Malim's survey of the existing record of the ritual landscapes of the middle and lower Ouse Valley in Bedfordshire, and the accumulated reports on excavations in



Fig 4.1 The location of Neolithic and Bronze Age sites mentioned in the text and appendices (those outside Northamptonshire): 1 Two rectangular splodges, Hazeltongue Lodge, Leicestershire (Harding with Lee 1987, 93); 2 Causewayed enclosure, Etton, Cambridgeshire (Pryor 1998); 3 Causewayed enclosure, Upton, Cambridgeshire (Oswald et al 2001); 4 Causewayed enclosure, Husbands Bosworth, Leicestershire (Butler et al 2002); 5 Palisaded enclosure, Brampton, Cambridgeshire (Malim 2000, fig 8.6); 6 Causewayed enclosure, Banbury, Oxfordshire (Oswald et al 2001, 154); 7 Beaker burial monument, Ravenstone, Bedfordshire (Allen 1981); 8 Mortuary enclosure ring ditch, Cardington/Cople, Bedfordshire (Malim 2000, fig 8.13); 9 Causewayed enclosure, Cardington, Bedfordshire (Malim 2000, 75); 10 Barrow cemetery, Roxton, Bedfordshire (Taylor and Woodward 1985); 11 Six ring ditches, Standlake, Oxfordshire (Catling 1982, 88–101); 12 Four ring ditches, Stanton Harcourt, Oxfordshire (Linington 1982, 81-6); 13 Causewayed enclosure, Abingdon, Oxfordshire (Avery 1982, 10-24); 14 Oval Barrow, Abingdon, Oxfordshire (Bradley 1982); 15 Beaker ring ditch, Radley, Oxfordshire (Riley 1982, 76-9); 16 Neolithic ring ditch, Newnham Murren, Oxfordshire (Moorey 1982, 55-9); 17 Linear ditches and southern enclosure, North Stoke, Oxfordshire (Case 1982, 60-74); 18 Long barrow/mortuary enclosure, Rivenhall, Essex (Buckley et al 1986); 19 Causewayed enclosure, Longstones Field, Beckhampton, Wiltshire (Gillings et al 1999; Gillings et al 2000); 20 Short linear ditch pairs, Huggate, N Yorkshire (Stoertz 1997, fig 8.10); 21 Short linear ditch pairs, Rudston, N. Yorkshire (Stoertz 1997, fig 8.13).

Oxfordshire (Case and Whittle 1982; Pryor 1985; Malim 2000).

In the light of these combined data sources, many of which were not available at the time of mapping, the Northamptonshire NMP data have been thoroughly reassessed and interpretations revised where necessary.

This chapter first seeks to categorise the monuments present in the project data by type, and reports any supporting evidence such as excavations, surface finds and excavated morphological comparisons. This is followed by a consideration of the distribution and context of these monument types and, expanding on the firm foundations of the RAP, proposes an overview of the development of Neolithic and Bronze Age landscape of Northamptonshire.

Monument types

Causewayed enclosures

Aerial photography and mapping have made considerable contribution to the study of causewayed enclosures nationally, particularly through Palmer's catalogue and plans (1976) and, more recently, by English Heritage's thematic synthesis on Neolithic enclosures (Oswald *et al* 2001).

All three known causewayed enclosures in the county were discovered in the 20th century by aerial reconnaissance (Fig 4.2: 1-3). The Briar Hill enclosure was the subject of intensive investigations in advance of housing development between 1974 and 1978 (Bamford 1985, 6). The combined evidence of the aerial photographs, excavation and geophysical survey has revealed a large oval enclosure, defined by a pair of causewayed-ditch circuits. Within this, and laying flush against its eastern side, was a smaller enclosure of more circular plan, which was described by the excavator as a 'spiral extension' or 'spiral arm' (Bamford 1985, 133). All three circuits were considered to be original to the enclosure. A long sequence of re-cutting was observed in the excavated ditch segments, but the early origins and longevity suggested by Bamford have been questioned, and the radiocarbon dating of this monument has recently been reassessed (Kinnes and Thorpe 1986; Meadows 2003). Meadows suggests that the earliest dates arise from intrusive material, but that a date of middle of the 4th millennium cal BC, given to the primary fill of the first re-cut of one of the enclosure segments 'appears to be accurate' (2003, 34).

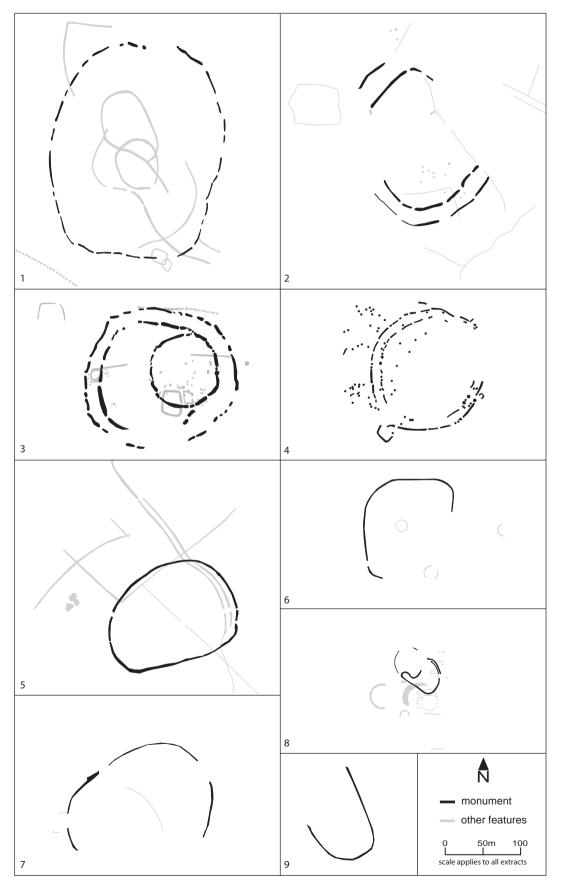


Fig 4.2 Causewayed enclosures and other large curvilinear enclosures in the project area. (Causewayed enclosures: 1 Northampton (Dallington) (NH461.8.1); 2 Southwick (NH9.14.1); 3 Northampton (Briar Hill) (NH542.11.1-2); 4 Husbands Bosworth, Leicestershire, simplified plan from geophysical survey (Clay 1999). Large curvilinear enclosures: 5 Chipping Warden (NH345.18.14); 6 Polebrook (NH400.21.1); 7 Bulwick; 8 Staverton A (NH18.1.1); 9 Stoke Albany (NH181.8.1).

The Dallington causewayed enclosure lies just 4.5km north-west of Briar Hill. Despite various evaluations in the area, little is known about it (OAU 1991; NA 1993). Its segmented ditches define a large oval area, with a notable bulge in the southeast quadrant. There are several other cropmarked features in this area, including a possible henge enclosure and a large oval enclosure both within the causewayed-ditch circuit.

The third causewayed enclosure lies c 50km downstream, at Southwick. Like Briar Hill, this monument consists of two near-concentric segmented ditch circuits enclosing an area presumed to be near oval. The eastern section is not visible, because it is masked by alluvium, but this may mean better preservation and perhaps even waterlogged deposits.

Despite a rigorous re-examination of all the mapped features in the Northamptonshire NMP data, no other convincing example of this monument type was found; cropmarks at Tansor (TL0529 9169), suggested by Palmer (1976, cat no. 38), and considered to be a pair to the Southwick example (Bamford 1985, 133), are dismissed as geological features both here and by Oswald *et al* (2001, 153, gazetteer no. 59).

Another causewayed enclosure in the project area has recently come to light at Husband's Bosworth in Leicestershire. It was revealed by geophysical survey targeted on the location of flint scatters, and then investigated further by trial trenching (Butler *et al* 2002). This enclosure is similar in plan and size to Southwick and the outer circuits of the Briar Hill monuments (Fig 4.2: 4).

The function or functions of the causewayed enclosures are poorly understood, and the two-dimensional plans generated by the project probably have little to contribute to this debate.

There are a number of other curvilinear enclosures within the survey area that are of similar scale, but that lack the distinctive features of causeways (Fig 4.2: 5–9 and Appendix 2). None has so far been excavated and they may be of significantly later date, but it is worth flagging them here as possible Neolithic enclosures. As Darvill and Thomas point out, there are a large number of undated enclosures in Britain and Northern Europe, and it would be highly significant if even a small proportion of these prove to be Neolithic in origin (2001, 10–11).

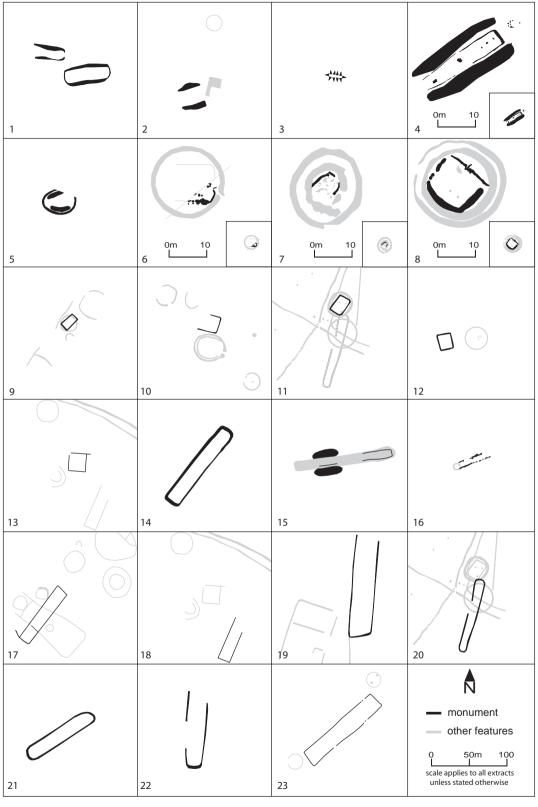
The largest of these possible Neolithic enclosures is an oval example at Bulwick. This feature was photographed in 1995 (SP9493/002) after NMP mapping for the area was complete, but has been plotted as part of the post-reconnaissance The Chipping programme. Warden enclosure is slightly D-shaped in plan and is closely associated with a long doubleditched linear feature. This area has also been field-walked. No finds were recovered from the enclosure interior, but the field to the north-east produced a wide scatter of Neolithic worked flints (D Hall pers comm; Hall SMR 266)

A Neolithic enclosure similar to these examples has recently been investigated in Longstones Field at Beckhampton, Avebury, Wiltshire, beneath a second avenue leading from the Avebury henge. This oval enclosure, measuring 140m by 100m, was identified by geophysical survey and on air photographs. Upon excavation it was found that the ditch circuit was actually semisegmented with the causeways between cut segments having been subsequently removed (Gillings et al 1999). That enclosure has been radiocarbon dated to the mid-3rd millennium BC but its excavators suggest that it is more akin to the earlier causewayed enclosures (Gillings et al 2000). Like the Chipping Warden example there was a notable absence of flint material to be recovered from the plough soil of the enclosure's interior (Gillings et al 1999).

Long barrows, elongated monuments and mortuary enclosures

Within the Raunds Area Project the elongated monuments – named the Long Barrow, the Avenue and the Long Mound – were among the earliest constructions in a complex that developed over two millennia, followed slightly later by the Long Enclosure.

The Redlands Farm Long Barrow originated as a freestanding façade and a limestone cist. The façade was re-cut by a narrow palisade trench, which surrounded a 50m-long mound that buried the cist (Healy *et al* 2007, 73–80). The mound was flanked by two broad ditches along its entire length; these were possibly the source of gravel in its gravel and turf make-up. The ditches widen slightly to the middle and south-east, and taper towards their terminals, giving a waisted outline to the space between (Fig 4.3: 4).



Nearly 1.75km to the north-east, at West Cotton, a mound of even greater length was discovered beneath the medieval settlement earthworks (Fig 4.3: 15). The

135m Long Mound consisted of turf and possibly topsoil, which in parts were built over a bayed substructure that may have held supporting hurdles

Fig 4.3 Long barrows, elongated monuments and known and possible mortuary enclosures in the project area. Long Barrows: 1 Flore A & B (NH466.12.1-2); 2 Flore C (NH466.20.1); 3 Pitsford (NH471.8.1); 4 Raunds (Redlands Farm) simplified excavation plan (after Healy et al 2007, fig 3.23); 5 Sutton Bassett (NH140.1.1). Mortuary enclosures: 6 Tansor (Tansor Crossroads Mound 1) simplified excavation plan (after Chapman 1997, fig 5); 7 Henslow Meadow mortuary enclosure, Aldwincle, simplified excavation plan (after Jackson 1976, fig 4); 8 Grendon mortuary enclosure, simplied excavation plan (after Gibson and McCormick 1985, fig 9); 9 Elton A, Cambridgshire; 10 Naseby (NH507.43.3); 11 Ketton B, Rutland; 12 Flore D (NH457.23.1); 13 Cosgrove B (NH289.1.3). Elongated monuments: 14 Raunds (Long Enclosure) simplified excavation plan (after Healy et al 2007, fig 3.40); 15 Raunds (Long Mound) simplified excavation plan (after Healy et al 2007, fig 3.7): 16 Raunds (The Avenue) simplified excavation plan (after Healy et al 2007, fig 3.15); 17 Grendon (Grendon Quarry) (NH45.20.22); 18 Cosgrove A (NH289.1.1); 19 Hardingstone (NH448.2.1); 20 Ketton A. Rutland: 21 Walcote, Leicestershire; 22 Dodford (NH465.63.1); 23 Barnack, Cambridgeshire (after Harding with Lee 1987, fig on p 76).

(Healy *et al* 2007, 54–64). A narrow gully was cut into the top of the mound, but there were no ditches around its base. At a significantly later date, two hollows, *c* 20m in length, were excavated either side of a short mid-section of the mound. Although there was some evidence of refurbishment of the mound, these pits are not considered to have been the source of any mound material and their function is unknown.

Over half a metre depth of mound material had survived in parts at both the Long Barrow and the Long Mound, but both were largely submerged by alluvial deposits dated to the Saxon period, and the Long Mound was buried beneath medieval settlement earthworks (Healy *et al* 2007, 54 and 82). Although such burial results in excellent preservation, as a consequence neither these nor many of the other monuments in the Raunds Area were identified from the air prior to excavation; in fact, their existence was largely unsuspected in advance of archaeological works.

Although of superficially similar form, aside from differences of scale there are significant distinctions between the Long Barrow and the Long Mound. The Long Redlands Farm Barrow constructed in an area of recent clearance, but in relative isolation from other known monuments, and had a clear mortuary function. In contrast, the Long Mound was built on established grassland and was part of a contemporary monument complex, which continued to develop. As at other sites of this period there was a burning episode at the Long Mound, which was absent at the Long Barrow, and funereal deposits were limited to the possibly later hollows that flanked the main body of this monument.

Few extant Neolithic long barrows or mounds are known in the rest of the county. Heavily disturbed, possible barrows survive at Longman's Hill, Pitsford (Fig 4.3: 3), investigated in the early 19th century; near Rainsborough Camp, Newbottle; and at Wallow Bank, Chipping Warden. The last was not recorded by the NMP Project, and the period of photography Longman's Hill and Rainsborough Camp mounds have been obscured by trees, so the NMP mapping is based on the results of ground survey (RCHME 1981, fig 123; 1982, fig 87). A slight ridge on the floodplain at Upton, barely perceptible on the aerial photographs, and originally thought to be a long barrow, has been investigated on the ground and is probably of natural origin (Jackson 1993–4, 70–3).

Of the possible levelled long barrows, three are in the parish of Flore, and were discovered during single flight in 1996 in an area that has produce significant Mesolithic and Neolithic material (Hall 1985, table 1, SMR903, 907, 910 and 912) Two of the three (Flore A and B) consist of a pair of broad ditches set approximately 10-15m apart (Fig 4.3: 1). Both display the same waisted appearance as the Redlands Farm Long Barrow. The shorter is 40m long and the longer, which is closed off by narrow gullies at either end, is 60m long. The latter, in particular, is similar to the form of some long barrows photographed and excavated in Lincolnshire, for example Giants Hill, Skendleby, Calceby and Stenigot (Jones 1998, fig 2 K, nos. 20 and 28).

The third example (Flore C) lies 1km to the north-east, and consists of a pair of short, broad ditches or trenches (Fig 4.3: 2). Thirty metres long, these trenches are some 20m apart. While their outer edges are irregular and convex, the facing sides are straight and parallel, suggesting that they are indeed related. A comparable site, described as 'two sub-rectangular splodges', is noted in close proximity to a possible hengiform enclosure at Hazeltongue Lodge, Leicestershire (Harding with Lee 1987, 179). Stoertz has identified similar 'short' long barrows at Huggate and Rudston in the Yorkshire Wolds (1997, figs 8.10 and 8.13). If this is a form of Neolithic long barrow, then other examples may easily be mistaken for small, hand-dug quarries. Owing to ploughing, survival of any mound is unlikely at any of these three long barrows, but the cut features may contain useful deposits and even cremated remains, as did the hollows flanking the Redlands Farm Long Barrow and Long Mound (Healy et al 2007, 92 and 94).

Features at Sutton Bassett, consisting of a ditched oval enclosure with two broad inner arcs, may also be the remains of a type of long barrow (Fig 4.3: 5). Unfortunately the photographic evidence is very poor, and this identification should be used with extra caution.

The Early Neolithic Avenue and the late 2nd to mid-3rd millennium Long Enclosure at Raunds were enclosed areas rather than mounded features (Healy *et al* 2007, 64–7 and 94–8). The Avenue, 60m-long, was defined by two parallel rows of segmented ditches and pits, incorporating natural

features and set 7–9m apart (Fig 4.3: 16). Other pits and gullies at both ends defined narrow causeways, which may have been entrances. The circuit of the Long Enclosure, although greatly disturbed by later features, was traced around an area 17m wide and 117m long (Fig 4.3: 14). This enclosure was rectangular in plan and had neat, rounded corners; the only internal features were probable tree throw holes. The ditch fills suggested the presence of an internal bank.

There are several elongated enclosures within the project data. The 97m-long enclosure at Ketton A, Rutland has rounded ends, but its circuit is discontinuous (Fig 4.3: 20). This break may be a real gap in the ditch rather than just a hiatus in the cropmarks. A similar break appears in the long 'paperclip' enclosure in the Octogon Farm complex, Cardington-Cople, Bedfordshire, which is thought to be one of the earliest monuments in a complex of mortuary enclosures, cursus, possible henges and ring ditches (Malim 2000, 78 and fig 8.13). A possible mortuary enclosure and several ring ditches have been recorded in the vicinity of the Ketton A long enclosure. There is, unfortunately, no contextual support for dating the elongated enclosures at Dodford and near Walcote, Leicestershire to the Neolithic period, but the latter has been categorised by Loveday and Petchey alongside other monuments of this date, including the Rivenhall 'mortuary enclosure' in Essex (1982, 32) (Fig 4.3: 22 and 4.3: 21).

Excavations at Grendon demonstrated that the narrow ditches of a 84m-long rectangular enclosure predated an Iron Age enclosure, and similarity of the fills to those in nearby Early Bronze Age ring ditches suggests an even earlier date (Jackson 1997, 13). The straight sides and angular corners distinguish this enclosure from those at Ketton A, Dodford and Walcote, but it is similar to an incomplete feature at Cosgrove A (Fig 4.3: 17–18). Both are comparable to the 110m-long 'short cursus' at Barnack in Cambridgeshire (McOmish 2003, 13) (Fig 4.3: 23).

Three sides of a possible elongated enclosure, at least 135m long and 32m wide, were recorded at Hardingstone, close to the River Nene (Fig 4.3: 19). This feature and other cropmarks of probable Iron Age or Roman date were photographed on just one occasion (ULM BVP85 5 June 1964). The northern section had already

been lost to quarrying, and now the later prehistoric elements appear to have been lost to development. While its original overall length is unknown, the plan of this feature is similar to the other 'short cursus' or long enclosure monuments although unlike the others it runs perpendicular to the course of the river.

Unexcavated elongated enclosures of probable Neolithic date are often described as mortuary enclosures, but this is an ill-defined class of monument (cf Loveday and Petchey 1982; Buckley et al 1986; Jones 1998; Malim 2000, fig 8.13). The investigations at the Raunds Long Enclosure suggest that although there was funereal activity at the site, this took place some time after it was built and, unlike Redlands Farm Long Barrow, burial was not its primary function. For this reason the descriptive 'long enclosure' is preferred to 'mortuary enclosure' for this form of monument.

Enclosures of proven mortuary function have been excavated at Aldwincle (Site 1) and Tansor Crossroads (Mound 1) (Jackson 1976a; Chapman 1997). Both examples are part of complex multi-phase monuments of which the most tangible elements are pits and small rectilinear enclosures encircled by later ring ditches (Figs 4.3: 7 and 4.3: 6). Similar to these are the rectilinear enclosure and façade that was excavated at Grendon Quarry, which although devoid of any human remains, are considered to be an example of a diverse monument type akin to the long barrows (Gibson and McCormick 1985, 63; Chapman 1997, 14–16) (Fig 4.3: 8).

Some elements of the multi-phase Tansor Crossroads and Grendon Quarry monuments were visible from the air. However, the surviving elements of the mortuary enclosures themselves were only slight gullies and pits, which if alone may not have been visible from the air. At Flore D, Cosgrove B and Naseby there are small, rectangular enclosures, which, although slightly larger, may also be mortuary enclosures (Fig 4.3: 12, 4.3: 13 and 4.3: 10). Worked flints have been recovered from the immediate vicinity of the Naseby enclosure, but so have many sherds of Roman grey ware (SMR1025, RCHME 1981, 143).

There are two cropmark arrangements that are reminiscent of the complex monuments at Tansor Crossroads, Aldwincle and Grendon Quarry. Both are outside Northamptonshire, in the Welland Valley at Ketton B, Rutland and Elton A, Cambridgeshire (Fig 4.3: 11 and 4.3: 9). The latter is also similar to a mortuary enclosure identified in the Octogen Farm complex in Bedforshire (Bedfordshire SMR1480/12; Malim 2000, fig 8.13). In the Elton A and Octogen Farm examples the inner rectangular enclosure extends slightly beyond the circuit of the ring ditch.

It is possible that other ring ditches recorded by Northamptonshire NMP may also have started as mortuary enclosures, but are unrecognised because the rectangular elements are too slight to produce cropmarks. Chapman noted that the ring ditches that encircled the known Northamptonshire mortuary enclosures were larger than those of the average Beaker barrow (1997, 17).

Countrywide a broad range of largely unexcavated ovate, trapeziform and oblong plan cropmarked enclosures have been attributed to the Neolithic period (Loveday and Petchey 1982, fig 32; Jones 1998, fig 2), but these plan forms are Iron Age and Roman period settlement enclosures, which are far more prevalent in the county. where Inevitably only the wider archaeological context suggests earlier activity have these less diagnostic forms been tentatively identified as potential Neolithic monuments, such rectilinear enclosure within the circuit of the Elton Henge (see Fig 4.5: 6).

Ring ditches, round barrows and henges

The nomenclature for circular monuments of possible or known Neolithic and Bronze Age date is often applied in a rather loose and inconsistent manner. Cotton 'Henge' for example, which is thought to date to the late-4th or 3rd millennia (Healy et al 2007, 108-9), consists of an irregular outer ditch circuit, approximately 75m in diameter with a smaller, more regular circuit near the centre. However, trial trenching and geophysical survey have so far failed to demonstrate the presence of any entrances, the presence of which are one of the defining characteristic of the henge monuments.

At the end of the mapping phase and despite strict adherence to the NMP thesaurus, the project database was similarly encumbered by ambiguous and muddled terminology. A rigorous re-assessment of the data, undertaken with reference to the

existing SMR information and the known excavation, geophysical survey and field-walking results (notably by Hall and Martin) has produced a more robust and informative record.

particular problem was the differentiation between the remains of round barrows and the eaves-drip gullies and drains that surround round houses. In their analysis of the distribution of ring ditches in the Nene Valley, Gibson and McCormick (1985, 65) excluded enclosures of 10m or less as possible hut-circles and used the local context to filter out any larger examples. However smaller ring ditches have been excavated in Northamptonshire: F7 in Field 12 at Grendon had a 9m diameter. Barrow 8 at Stanwick was 6m and the Double Ring Ditch at West Cotton was less than 4m in diameter (Gibson and McCormick 1985; Jackson 1997; Healy et al 2007, 169 and 136-41). Furthermore, a significant proportion of the excavated hut circles match or exceed this 10m-diameter cut-off: Kings Heath (10-20m), The Lodge and the Long Dole DIRFT (10-20m), Swan Valley (11m), Pineham Barn, Upton (12.5m) and in Enclosure A at Grendon (14.5m) (NA 1990; NA 1994a; NA 1994b; NA 1989; Jackson 1997).

In practice, interpretation of the more ambiguous circular and sub-circular monuments draws heavily on their relationship to other monuments, and as a consequence the record may under-represent funereal sites in areas where later settlement and agriculture remains are also visible.

There were 457 complete, or near complete, ring ditches and circular and subcircular enclosures of possible Neolithic or Bronze Age date identified in the project data (Table 4.1). A further 35 possible ring ditches were very incomplete.

Table 4.1 The ring ditches, barrows and henges recorded by the project

total number of circular monuments of all types,	
complete or near complete simple ring ditches	383
multi-ring ditches	40
causewayed ring ditches	18
large ring ditches and henges	17
incomplete simple ring ditch	35
and in addition:	
round barrow (mound)	7

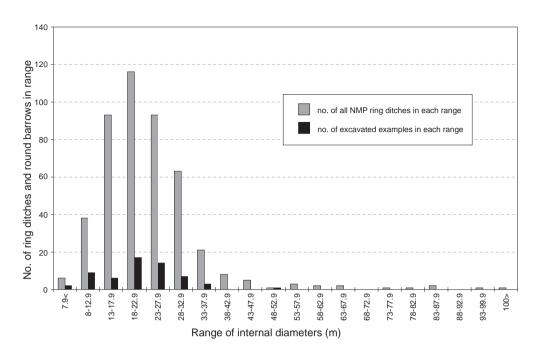


Fig 4.4
Comparison of the internal diameters of excavated and NMP ring ditches and round barrows.

A substantial number of ring ditches and round barrows have been excavated in and Northamptonshire neighbouring counties since the early 1970s. From the published and grey literature a sample of some 60 excavated or geophysical surveyed ring ditches were available for analysis (see Appendix 1). The diversity in the range of size and form in this sample provides a useful comparison for the Northamptonshire NMP examples. There is a small degree of overlap between the excavated and Northamptonshire NMP samples (those with NH numbers in Appendix 1).

For purposes of diameter comparisons, all measurements are read internal to ring ditch, and from the inner-most where more than one circuit is present (see below). Figure 4.4 shows that the distribution of diameter ranges of the Northamptonshire NMP sample is similar to that observed in the excavated examples. The average diameter of the excavated barrow ditches is 21-2m and the actual range is between 3m and 50m. Over half of all the excavated examples are 18m or greater, and less than 28m in diameter; six are between 28m and 32m, and just five measure more than 32m. Just over one quarter is less than 18m in diameter.

The average diameter of the Northamptonshire NMP ring ditches is 23m, but the overall range is much wider than the excavated sample and includes enclosures up to 104m in diameter. Forty-

one percent of all enclosures are between 18m and 27m in diameter. Thirty percent of ring ditches are less than 18m in diameter – a close reflection of the representation of smaller enclosures within the excavated sample. There are progressively fewer examples as the diameter range increases greater than 37m, but the sample does include a significant number of large circular and sub-circular enclosures up to 95m, while monuments of comparable scale were not included in the excavated sample.

There are few comparative datasets or size criteria against which to consider these two samples, although there are clearly perceptions as to what the normal size range of ring ditch is. Ashbee had observed bowl barrows from 9m to 45m in diameter, and pond barrows and saucer barrows over narrower ranges, 9-36m and 18-27m, respectively (1960). Chapman noted that the ring ditches surrounding Neolithic mortuary enclosures at Tansor Mound (34m in diameter), Aldwincle (oval 34? 39.5m) and Grendon Barrow V (inner ditch 26m in diameter) '...certainly exceed the mean [diameters] for Bronze Age round barrows', and went on to suggest that other larger ring ditches may have Neolithic origins (1997, 17). Similarly, Bradley described the 32m-diameter round barrow excavated within the henge at Maxey as 'outsize' (1993, 101).

Analysis of a similar, though smaller, sample of ring ditches in the Stour Valley suggested a quite different profile to the Northamptonshire size range (Strachan et al 2000). In this sample nearly 60% of ring ditches were less than 20m in diameter and 30% were between 20–39m, conversely, in Northamptonshire, 38% are less than 20m and 56% between 20 and 39m. Importantly though, the Stour Valley sample was selected on morphological criteria alone, and did not attempt to distinguish ring ditches of round barrows from hut circles and other domestic enclosures. In common with Northamptonshire, the Stour Valley has a handful of larger ring ditches, in this case up to 79m in diameter.

Morphology within the Northamptonshire sample of ring ditches is, by definition, fairly uniform, but there are certain aspects that warrant further discussion; the nature of the very large enclosures, the presence of entrances in ring ditches and multi-ditched enclosures.

Large ring ditches and henges

Fewer than 4% of the ring ditches and circular enclosures mapped by Northamptonshire NMP were 45m or greater in diameter (see Table 4.1 and Fig 4.4). A few of these have been the subject of archaeological intervention but none have been thoroughly investigated. The sub-circular or oval 'ring ditch' F13 at Grendon Quarry, defined by a broad, welldefined cropmark, was only partially examined before its destruction (Fig 4.5: 1). Observations made during its removal record a very broad ditch encircling an area approximately 50m in diameter. This was covered by approximately 500mm of mound material, possibly retained by a kerb or walling (Jackson 1997, 5) No entrance was found during excavation, although photographic sources suggest there was one facing south-west. Unfortunately, this enclosure and its mound could not be dated but the excavator did believe them to be of prehistoric date (Jackson 1997, 5).

Limited excavation at West Cotton 'henge' supports a Neolithic date, but geophysical survey has so far failed to produce any evidence for an entrance (Fig 4.5: 2) (Healy and Harding 2007, 210). The slightly irregular, sub-circular perimeter ditch and smaller internal ring ditch are comparable to the Maxey 'henge', but are perhaps closer to the smaller enclosure to the south-west at TF1307 (Fig 4.5: 4 and 4.5: 5). Although even more irregular in shape, the large enclosure at

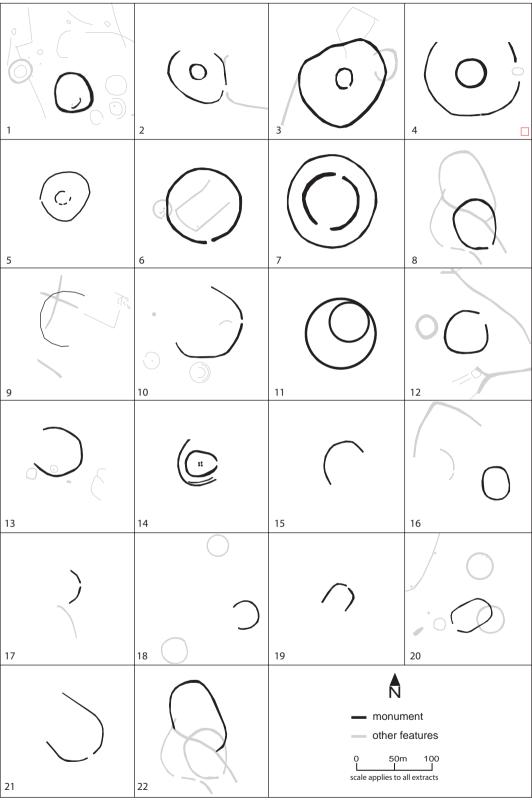
Swinehead, Bedfordshire may be another example of this monument type (Fig 4.5: 3).

Elton Henge, Cambridgeshire, is unusual in that it appears to contain three sides of a large rectangular enclosure (Fig 4.5: 6). A slot trench through the ring ditch circuit suggested the presence of an internal palisade, and produced pottery of possible Neolithic date (Taylor 1979, 332). This enclosure has a narrow, causewayed entrance opening to the south. In addition the 'henge' circuit cuts or is cut by a smaller ring ditch with internal pits.

The ovoid enclosure near the centre of the Dallington causewayed enclosure has been mooted as a possible henge monument, but dismissed elsewhere (RCHME 1979, 30 and fig 2; Harding with Lee 1987, 198) (see Figs 4.2: 1 and 4.5: 8). There is a south-east facing causewayed entrance, and limited trial excavation has recovered material, including polished axe fragments, that support a Neolithic date (OAU 1991). This possible henge cuts or is cut by the ditches of a large oval enclosure (discussed below).

The large ring ditch at Misterton, Leicestershire appears truly circular, but others at Staverton B, Naseby and Earls Barton are notably less regular and slightly polygonal (Fig 4.5: 18, 4.5: 13, 4.5: 10 and 4.5: 12). The cropmarks defining the Staverton B and Naseby examples are particularly narrow, and may indicate palisade trenches rather than ditches. A rather egg-shaped enclosure at Staverton C has two circuits; the outer circuit is incomplete, probably masked by the modern hedgeline (Fig 4.5: 14). Towards the centre of the inner enclosure there is an arrangement of four large pits. Smooth arcs of ditch, such as those at Holcot and Lamport, may also be sections of large ring ditches, and the two mentioned have east-facing causewayed entrances (Fig 4.5: 15-17). The Holcot examples are part of a loose group of five larger than average ring ditches.

At Shawell, Leicestershire, a substantial ring ditch 47m in diameter lies within an even larger ring of 87m in diameter (Fig 4.5: 11). Unusually these are not arranged concentrically; instead, the smaller enclosure abuts the north-east segment of the perimeter of the larger. A similar layout is apparent in the Beaker 'palisaded enclosure' at Brampton, Cambridgeshire (Malim 2000, fig 8.6), and both Shawell and Brampton are reminiscent of the 'spiral arm' arrangement within the Briar Hill causewayed enclosure.



At Kings Sutton a narrow, continuous outer ditch surrounds a broader inner ditch that has opposed causewayed entrances oriented on a NNE to SSW axis

(Fig 4.5: 7). There are no visible entrances in the narrower outer circuit, but this may have been a precursor to the henge, or a later addition.

Fig 4.5 Large ring ditches (diameter > 45m), henges and oval enclosures in the project area. Large ring ditches/henges: 1 Grendon (Grendon Quarry) (NH45.24.2); 2 Raunds (Cotton Henge) (NH389.1.1); 3 Swinehead, Bedfordshire; 4 Maxey henge, Cambridgshire, simplified excavation plan excluding later features (after Pryor 1985, fig 40); 5 Maxey hengiform no. 80 (after RCHME cropmark plan); 6 Elton C, Cambridgeshire; 7 Kings Sutton (NH237.1.1); 8 Northampton (Dallington) (NH461.8.3); 9 Raunds (Stanwick) (NH387.27.1); 10 Naseby B (NH507.43.8); 11 Shawell A and B. Leicestershire: 12 Earls Barton (NH14.6.1); 13 Staverton B (NH17.5.1); 14 Staverton C (NH352.1.1); 15 Holcot A (NH473.27.4); 16 Holcot B (NH473.27.2); 17 Lamport (NH491.3.1); 18 Misterton, Leicestershire. Oval enclosures: 19 Raunds (Southern Enclosure, Stanwick) (NH387.30.1); 20 Fotheringhay (NH431.18.1); 21 Flore E (NH466.19.1); 22 Dallington (NH461.9.1)).

There is slight evidence for a large, incomplete ring ditch, perhaps 77m in diameter, between the Roman villa at Stanwick and the Southern Enclosure (Fig 4.5: 9). Visible only on a single set of oblique photographs from ULM, this enclosure lies within an area trenched during investigations at the villa. Although some features were located in its vicinity, they were not pursued and did not produce any material (F Healy pers comm).

Few of these large ring ditches are easily reconciled with the description of the classic henge monuments: 'a circular area of variable size enclosed by a bank and a ditch, the former normally sited outside the latter and broken by one or more entrances' (Wainwright 1989, 14). Only the inner ring ditch at Kings Sutton has two entrances, a feature of the Class I monuments, and visible entrances are absent in several examples, excluding them from the Class II group (Piggot and Piggot 1939). In none of the unexcavated examples is it possible to discern the presence or position of a bank, because these monuments lie in areas of intensive medieval and modern cultivation and have been levelled by ploughing. The limited excavations at Cotton 'Henge', Elton Henge Dallington have also failed demonstrate the presence of an external bank. However, it is unlikely that any of the other monuments originally incorporated massive mounds as did the Grendon enclosure, because the perimeter ditches alone were insufficient to provide enough material to raise a mound of any great spread or height over the whole enclosed platforms.

So, with the exception of the Grendon example, the large ring ditches do provide the most basic requirements of the henges: an enclosed space of near circular plan. It has been observed elsewhere that the imperative of the henge builders, be it social and/or functional, may also have been expressed in other monuments and activities, such as the digging of pits into the existing Briar Hill interrupted ditches (Chapman 1999), or the construction of the pit circle at East Stoke, Nottinghamshire (Deegan 1999, 29).

Such variability, as expressed in diverse monument types, is to be expected.

Causewayed ring ditches

The term 'hengiform' is commonly used to describe a diverse range of unexcavated curvilinear enclosures united by the common presence of one or more entrances and an outer bank (see EH Thesaurus). However, 'causewayed ring ditch', as appropriated for the Neolithic example at Stanwick, is used here in preference to 'hengiform' because evidence for bank location is generally unforthcoming from air photographs.

Less than 4% of the sub-45m ring ditches identified in the project have one or more entrances, although they are present in a higher proportion of the very large rings, described above. Causewayed ring ditches are likely to be significantly underrepresented in the project data, because a real break in a ditch circuit cannot always be distinguished from a brief interruption in the cropmarks. Some causewayed ring ditches may have been misinterpreted as hut circles and vice versa. This form is also likely to be under-represented in the excavation record, because total excavation at ring ditch and barrow sites has been rare, and has often been carried out in difficult rescue conditions.

Most of the examples identified in the project have wide entrances and slightly flared ditch terminals. Others, with less clearly defined entrances, may have been overlooked. The Causewayed Ring Ditch at Raunds did not appear have had a mound, and its ditch, dated to 3340–3020cal BC, is thought to have either been revetted or held a close-set timber circle (Healy *et al* 2007, 98–104). Given the rarity of excavated examples, this project's causewayed ring ditches are probably best considered as a diverse group of monuments that is distinctive from the round barrows and possibly significantly under-represented.

Multiple ring ditches

Just 36 of the ring ditches recorded by the Northamptonshire NMP have two circuits, and only four have three. Few excavations in the region have been able to demonstrate the sequence of development in multi-ring ditches, but those that do have always shown the smallest, innermost circuit to be the oldest and the outer ring to be a later addition. Elsewhere, however, this is not always the case: excavation of the multiple ring ditch excavated at Site 5m, Llandysilio, Powys has shown the larger, outer ring to be earlier than a smaller internal circuit (Warrilow *et al* 1986, 64 and fig 64).

None of the inner rings of the Northamptonshire NMP multi-ring ditch

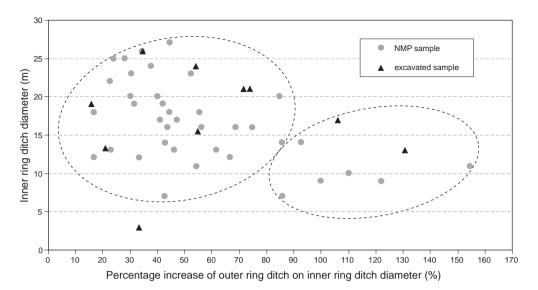


Fig 4.6
The relationship between
the diameter of inner ring
ditch and the percentage
increase to outer ditch of
multi ring ditches.

sample exceeds 27m in diameter. The increase in diameter between inner and secondary circuits ranges from c 17% to 155% and falls into two groups (Fig 4.6). In the majority of examples, and across the whole size range, the outer ditch was less than 80% larger than the inner ditch. In fact, because two ditches separated by a narrow gap may appear as a single broad cropmark, there is likely to be an underrepresentation of the rings with the more modest increments, particularly those that are smaller in diameter to start with.

In the second, smaller group where the increase between inner and outer is greater, the inner enclosures are all between 9m and 17m in diameter, which is significantly lower than the average for all ring ditches. The ring ditches excavated around the

site name

Aldwincle Mortuary Enclosure and ring ditch F14/15 in Field 12 at Grendon also fall within this range, but as a group these monuments do not share any other visible characteristics.

If extra circuits around ring ditches are later additions, then their presence has little to do with the original barrow architecture. The digging of further ditches may have been required for enlargement of barrow mounds, but materials such as turf would not have required such excavations, and it has been demonstrated in some cases that ditch spoil was not added to mounds (eg inner ditch and mound of Barrow 5 (Healy *et al* 2007, 141–7). The actual act of re-defining these monuments with fresh ditches: a re-enactment of previous works, may have been the motivation for such efforts.

Table 4.2 Examples of significant earlier features associated with multi ring ditches

Site 1. Mortuary enclosure, Aldwincle, Northamptonshire	preceded by Neolithic mortuary enclosure (Jackson 1976)
Area B Ring Ditch I, Grendon, Northamptonshire	some pre-mound features including possible plough scrapes. (Gibson and McCormick 1985, 64)
Area C Ring Ditch V, Grendon, Northamptonshire	preceded by possible Neolithic mortuary enclosure. (Gibson and McCormick 1985, fig 24)
Radley 15, Barrow Hills, Oxfordshire	Pit 1 contained disarticulated remains of one or more individuals. Probably reinterred from elsewhere, Middle Neolithic sherds associated with the remains were dismissed as "random inclusions". (Riley 1982)
Barrow 6, West Cotton, Northamptonshire	significantly earlier features including small stone setting. Burials include reinterred Neolithic remains. (Healy et al 2007, 130–6)
Barrow 1, Irthlingborough, Northamptonshire	rich and elaborate primary burial in oak chamber, topped with limestone cairn and large quantity of animal teeth and bone including auroch tooth and boar tusk that were significantly older than the primary burial (Healy et al 2007, 153–64)
Barrow 5, Irthlingborough, Northamptonshire	preceded by possible timber circle. (Healy et al 2007, 141)

comments

That just 8% of the ring ditches mapped by the project had received such modification implies a high degree of selectivity. A brief survey of multi-ring barrows excavated in Northamptonshire and neighbouring counties highlights some striking similarities. Some features of selected monuments are listed in Table 4.2. The common theme of longevity runs through this selection: in some cases the initial ring ditch was itself a modification of a pre-existing monument, or the primary deposits included already old material. This is not to say that simple ring ditches never reveal such complexities, but only that with the multi-ring ditches the probability is high.

Barrows 1, 3, 5 and 6 at West Cotton and Irthlingborough were also significant sites of secondary burials (Healy et al 2007, 134, 145-147, 151 and 159). Secondary burials were inserted into mounds, but have also been recovered from barrow ditches interestingly, in the berms between circuits. The wide berm between the secondary and tertiary ditches of Barrow 6, further enclosed by the arc of the Ditched Enclosure, and the space between the ditches of F14/15 Grendon, had both been cut by pits containing human remains (Jackson 1997, 5; Healy et al 2007, 134). This may indicate the significance of the broad berms created by the widely-spaced ditches of the second group (above): they may have been deliberately constructed to accommodate interments and possibly above-ground features that do not survive. The use of such an area can be seen on a larger scale at Maxey, where pit circles were built on the 'berm' between the henge circuit and the inner ring ditch (Simpson 1985, 251-4).

Other monuments

Excavations at Stanwick revealed the northeast end of an enclosure with parallel sides and a well rounded end with a wide entrance (Healy et al 2007, 101–8). The Southern Enclosure, as it is known, was 30m wide, but its overall length is unknown; the air photographs depict no more than was excavated and the long sides of the enclosure project into a heavily disturbed area (Fig 4.5: 19). The apparent absence of food remains and dearth of cultural material, together with the evidence of the charred plant remains from internal pits, indicate that this enclosure was an element of the monument complex and

probably of Neolithic date (Healy et al 2007, 101–8). There is nothing about the form of this enclosure, in so far as it is known, that is diagnostic of a Neolithic ritual monument, and there is nothing in the shape to distinguish it from numerous Iron Age and Roman period settlement enclosures. However, in view of their local context, the oval enclosures at Fotheringhay and Dallington may be of similar date (Fig 4.5: 20 and 4.5: 22). The Fotheringhay example is surrounded by, and possibly cut by, ring ditches, while the Dallington one lies within the causewayed enclosure and is cut by, or cuts, the putative henge.

At Flore E, close to the squat quarry ditches of the possible long barrow, lie the remains of a large, probably palisade-defined enclosure (Figs 4.5: 21 and 4.8). The slightly trapezoidal form is without parallel in the county but contributes to the growing diversity of monument architecture in these periods.

Settlement and subsistence

There is scant excavated evidence for Neolithic and Early to Middle Bronze Age settlement in Northamptonshire, which is surprising in view of the wealth of information on monument building produced from the excavations at Raunds, Briar Hill, Grendon and Tansor.

A scatter of hollows and hearth debris at Ecton comprise the best known Neolithic occupation site in the county at the time of writing (Moore 1975, 5–8). Although pits containing Neolithic material are occasionally discovered by chance during excavation of later settlement sites, it is difficult to collate this evidence into a cohesive body from the vast quantity of grey literature produced by developer-funded archaeology. Such ephemeral remains are unlikely to be recognised as evidence of early settlement on air photographs.

The valley floor at Stanwick and Raunds has yielded evidence of stock control gullies, ditches and trackways constructed in the 2nd millennium (Healy et al 2007, 191–4). The layout of these boundaries appears to have been planned with some reference to the existing monuments (Healy et al 2007, 194). Upstream at Grendon, ditches cut by a double-ring are suggested to be the remains of an early prehistoric field or boundary system (Jackson 1997, 5). This and nearby ditches of similar alignment were visible on air photographs.

Table 4.3 Numbers of Neolithic and Bronze Age findspots within 500m of cropmarked sites recorded by the project

period	total combined records for the county	no. within 500m of any cropmarked site	no. within 500m of Neo & BA monument
Neolithic	377	276	82
Bronze Age	355	225	78

Field-walking and the collection and analysis of flint scatters have made significant contributions to the study of Neolithic and Bronze Age settlements sites (Martin and Hall 1980; Hall 1985). The combined data for the Neolithic from Martin and Hall and the SMR, as discussed in the introduction, contains 377 records in the county, ranging from single find spots to extensive lithic scatters; there are slightly fewer records for the Bronze Age (Table 4.3). The distribution of find spots can be compared to that of the cropmarked features mapped by this project. Three-quarters of the Neolithic finds were recovered within 500m of the site of cropmarked features, but less than a third of those were recognised Neolithic or Bronze Age monuments; a similar relationship is observed in the distribution of the Bronze Age material. Furthermore, there are relatively few examples of find spots or scatters that have been retrieved from the same modern field unit as known Neolithic and Bronze Age monuments. There are exceptions, however: the flint scatters at Cotton Henge (SMR 870); at Titchmarsh, where a large scatter of Mesolithic and Neolithic material was recovered from the same location as a number of ring ditches (Hall 1985, table 1 Titchmarsh 19-23); and Flore, where Neolithic material was found close by the location of a possible palisaded enclosure, a short long barrow and a small ring ditch (see Fig 4.8).

Thus, it would appear that known Neolithic and Bronze Age material is absent from within 500m of three-quarters of the possible monuments of those dates, supporting Hall's observation that lithic settlement distribution avoids areas of barrows (1985, 33). This may suggest that there was a real distinction between the place of lithic production and use, and the location of the monuments and their associated activities.

Where flint scatters fall among the cropmarks of Iron Age and Roman activity

they may indicate the presence of earlier settlement; such knowledge can inform the strategy for ground investigations in the event that the site is threatened.

Landscape and chronology

The environmental background

Studies of environmental conditions in Northamptonshire in the Neolithic and Bronze Age have focussed on the major river because most environmental evidence is derived from excavations along the river terraces and valley floor (Brow and Meadows 1998: Brown 2000: Campbell and Robinson 2007). These areas have faced the greatest threat from gravel extraction and, while the Northampton Sand and Ironstone and the covering boulder clay deposits have also been heavily exploited, these are less conducive to the preservation of organic materials than the valley bottom sites. Some of the deposits sealed by alluvium on the valley floor were also waterlogged, and organic preservation was exceptional (Campbell and Robinson 2007, 18).

The environment of the Nene Valley floor in the Neolithic and Bronze Age was of a very different character to the floodplain landscape of the last millennium. Robinson characterises the Nene in the prehistoric period as a relatively stable, multiple cross-linked system, a simplification of the minor braided channels that had cut across the earlier gravel terraces (Robinson 1992, 198–200; Robinson 2007, Panel 2.1). With a seasonally-low water table the brown soils that developed on the higher gravel terraces and islands were well drained and suitable for cultivation, while the soils on the lower gravels and the channel margins were gleyed and supported marsh vegetation. Not until the early medieval period was there significant alluviation of the valley floor, and then it was a relatively sudden phenomenon precipitated by large-scale ploughing of the valleys sides and, most importantly,

the mainly boulder clay plateau. The effect was to bury the former land surface under as much as 2m of fine-grained silty and clayey alluvium, and a levelling of the topography of the valley floor. A few of the higher gravels protrude above the blanket of alluvium but others are buried to variable depths.

Based on the combined environmental evidence from the Raunds excavations. Campbell and Robinson have proposed a sequence of vegetational changes during these periods (2007, 21-8). Clearance of the valley floor in the early Neolithic at Raunds created a corridor of grassland within which the first monuments were built. Scrub regenerated in parts, but was episodically cleared when existing monuments were refurbished and new monuments constructed. The effect on a wider scale was to create a mosaic of different land cover as these sequences were replayed at different times along the valley floor. In the Early Bronze Age woodland and scrub was increasingly replaced by grassland, resulting in an open landscape by the Middle Bronze Age.

Extrapolating from the picture for the valley floor, it seems unlikely that during the Neolithic and Bronze Age woodland clearance was any more organised or intensive on the valley sides and is unlikely to have penetrated far into the heavy claylands.

Today, springs, brooks, streams and rivers are abundant in most parts of the county, and hence most prehistoric sites are not far from a source of water, but, as Hall observes, this should not detract from a probable genuine preference for riverine locations in these periods (1985, 32). There are, however, a few areas that are today less well supplied: the extensive limestone outcrops in the north-east and in the southwest of the county, and in some areas of extensive boulder clay cover. Robinson notes that the water table was relatively low during these periods and did not rise until the Roman period, and this may have exacerbated the effect of a poor surfacewater supply (1992, fig 19.3).

The landscape and topography of Northamptonshire are characterised by the heavily dissected uplands to the north and west, the broad river valley and the boulder clay plateau to the east, but the gradations between them are subtle. Northamptonshire Archaeology had produce a physiographic model for NCC as part of the county's Landscape Characterisation Assessment, which identifies ground as either Valley Floor, Valley Side, Lias Upper Ground, Ironstone Upper Ground, Limestone Plateaux or Clay Plateaux (Northamptonshire Archaeology 2003). Although not definitive - the distinction between Valley Side and the Upper Ground

Table 4.4 The presence of monuments in the different landscape zones of Northamptonshire (based on the monuments listed in Appendix 2, and Northamptonshire Archaeology's Physiographic Model of Northamptonshire 2003)

monument type	period	sample size	valley floor	valley side	lias upper ground	ironstone upper ground	clay plateaux	limestone plateaux
proportion of county			9%	36%	21%	6%	26%	2%
causewayed enclosures	Early Neolithic	4	•	•	•	•	_	_
non-causewayed enclosures	Early Neolithic?	5	_	•••	•	_	_	_
long barrows	Early Neolithic	8	•	•	•••	•	_	_
avenue & long enclosures	Middle to Late Neolithic	7	•••	••		_	_	_
mortuary enclosures	Middle to Late Neolithic	8	•••	•	•			
large ring ditches and henges	Middle Neolithic to							
	Early Bronze Age	17	•	•	••	•	_	_
causewayed ring ditches	Unknown/Neolithic-							
Ü	Bronze Age?	17	•	••	••	•	_	_
ring ditches (multi)	Mainly Bronze Age							
	but some with							
	Neolithic origins	40	••	••	••	•	•	_
simple ring ditches<28m diam	Some Neolithic							
	but mainly Bronze Age	337	••	••	•	•	•	•
simple ring ditches 28– 45m diam	Some Neolithic							
	but mainly Bronze Age	91	••	••	•	•	•	_

not represented, • 1–25%, •• 26–49%, ••• >50

is contentious in some areas – if the model is used consistently this should not detract from the overall significance of variations in the distributions of different monuments types as summarised in Table 4.4.

The Mesolithic background

The excavations at West Cotton and Raunds demonstrated Mesolithic activity in both the general area and preceding the construction of certain of the earlier monuments (Healy *et al* 2007, 47–53). Whether this should be seen as evidence of continuum or coincidental use of a common location is debated (Healy *et al* 2007, 87–8).

information sources of the Mesolithic record for Northamptonshire, and its shortcomings, were well documented by Phillips as part of the Regional Research Frameworks initiative for the Midlands, but still it is useful to consider the distribution of the known Mesolithic sites alongside what may be the earliest monuments recorded by this project previously 1998). Hall has (Phillips observed that all the identified Mesolithic sites lie on the permeable geologies, although some outcrops may be so small and localised that they are absent from the relatively coarse BGS mapping (1985, 31). It has been argued that this preference for lighter soils was less pronounced in the claylands of the East Midlands. In his survey, which included a large part of Northamptonshire, Clay observed that 20 of 44 Late Mesolithic 'core sites' were sited on impermeable geology (Clay 2002, 27). However, clay sub-strata cover approximately 60% of his survey area and, moreover, this analysis is based upon relatively small-scale geological mapping, which may omit localised outcrops of freerdraining geology (Clay 2002, 27).

Figure 4.7 demonstrates the strong preference towards both lighter soils and riverine locations that Hall has previously identified in the distribution of Mesolithic sites in Northamptonshire (Hall 1985).

The earliest monuments

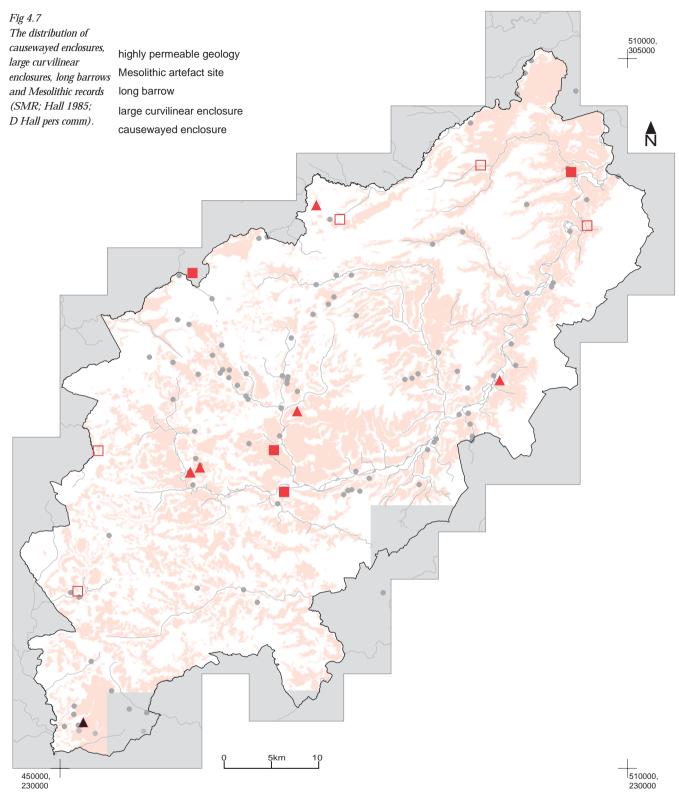
The causewayed enclosures, the noncausewayed enclosures and the handful of known and possible long barrows recorded as earthworks and cropmarks are possibly the earliest monuments recorded by this project. The Briar Hill causewayed enclosure was built on a north-facing slope, overlooking the confluence of the Brampton Arm of the Nene with the main river valley. The Dallington causewayed enclosure lies no more than 4.75km to the north-west and sits on the edge of a small plateau between the Brampton Arm of the Nene and a small brook. The two enclosures are just intervisible, but tall trees on the higher ground between them would have obscured the view of one from the other. The Southwick enclosure lies much farther downstream, on the approach to the fenland, between two tributaries of the Nene on the edge of the valley floor.

There is evidence of earlier activity in the environs of these enclosures: a Mesolithic component in the Briar Hill tool assemblages; an antiquarian collection from Duston c 1km south-west of Dallington, and Mesolithic material collected less than 500m upstream of the Southwick enclosure (Phillips 1998, 1–2; SMR2782/0/1). What the Mesolithic tool users were doing at these locations and how this relates to the activities of the later monument builders is largely unknown, not least because an adequate analysis of the Mesolithic material is lacking (Phillips 1998, 1–2).

The possible Neolithic non-causewayed enclosures are distributed widely across the county, but in similar situations (see Fig 4.7). The Bulwick enclosure lies on the banks of a minor brook, close to its confluence with the Willow Brook, and the Stoke Albany example is sited near the head of a small valley off the River Welland. Both the Chipping Warden and Staverton A example sit at the head of spurs, overlooking the Rivers Cherwell and Leam, respectively, with the ground rising behind them.

The Polebrook and Bulwick sites are within 10km of the Southwick causewayed enclosure and perhaps are part of the concentration of Neolithic growing enclosures found in the neck of land between the rivers Welland and Nene, which reaches its greatest density beyond the survey area at Maxey and Etton. The Chipping Warden, Staverton A and Stoke Albany sites lie close to the watersheds between the Nene and the Cherwell, Avon and Welland river basins, respectively. There are no examples in the Nene catchment around the Briar Hill and Dallington causewayed enclosures.

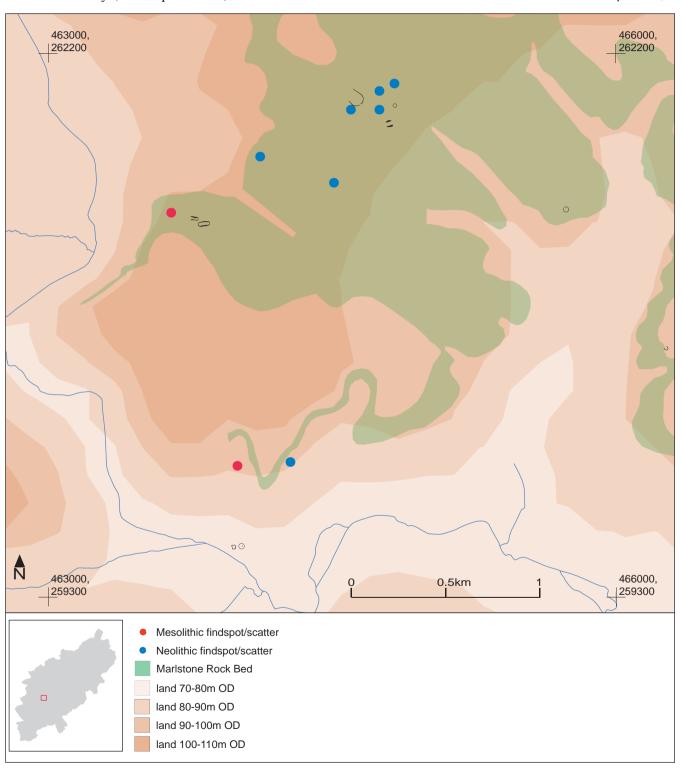
At Flore, three levelled long barrows and a large, trapezoidal, palisaded enclosure lie on either side of a broad, flat tongue of exposed



Marlstone Rock Bed, flanked by the River Nene and a small brook (Fig 4.8). The long barrows (Flore A–C) sit below the local high points, just short of the crest of the very shallow valley sides. Two of the long barrows lie close to one of the richest Mesolithic flint scatters Hall has reported (1985, table 10). The Pitsford long barrow sits on the edge of a similarly flat area of Northampton Sand and Ironstone, between tributaries of the Brampton Arm of the Nene. At a slightly higher altitude, the Rainsborough/Newbottle long barrow sits just below the crest of the hill on a north-facing slope overlooking a tributary of the River Cherwell. Again, Mesolithic material has been recovered from the immediate vicinity (D Hall pers comm); Hall

SMR196–7). The possible early Neolithic funerary monument at Sutton Bassett lies on a gentle west-facing slope, between two small brooks that drain into the River Welland. The Wallow Bank long barrow at Chipping Warden is located on a very gentle slope that descends down to the River Cherwell.

Fig 4.8
The Flore long barrows and oval enclosure and
Mesolithic and Neolithic findspots and flint scatters in the vicinity (SMR; Hall 1985; D Hall pers comm).



In contrast the long barrow excavated at Redlands Farm, Stanwick is located down on the valley floor of the River Nene. It sat on a small, low, gravel island in the floodplain, overlooking a lower-lying area (Healy et al 2007, 73). There was no indication of the presence of this monument on air photographs taken prior to its excavation because it was covered, at least in part, by alluvium. Although there are obvious problems for monument detection in this location - alluviation and extensive quarrying being the main issues - no other long barrows have been discovered on the valley floor, either from the air or by the extensive excavations at Grendon, Aldwincle and Wollaston.

Environmental evidence from the Early Neolithic Long Barrow at Redlands Farm suggests an open grassland, perhaps cleared of trees not long before construction of the monument, with a background of mixed woodland of oak, lime alder and hazel, and, significantly, the perhaps distant presence of Scots Pine (Campbell and Robinson 2007, 23).

distribution of these The early monuments demonstrates that the woodland clearance identified at Raunds at this time must have extended beyond the valley floor. The majority of the known causewayed enclosures, large enclosures and long barrows lie well above the valley floor on the freely-draining Northampton Sand and Ironstone or the similarly-ferruginous Marlstone Rock Bed (Fig 4.9). It is on these geologies, where the soil is acidic, that the Scots Pine detected at the Redlands Farm Long Barrow may have stood (Campbell and Robinson 2007, 23). Uniquely among the trees of Mesolithic and Neolithic Britain, the pine can be killed by fire (Rackham 1996, 34). Clearance by this means is significantly less labour intensive than the exertions required to kill, uproot and remove other tree species. Undoubtedly this advantage was understood in the Mesolithic and Neolithic: indeed. Mesolithic burning is considered to be a major factor in the disappearance of pine from large parts of the country (Rackham 1996, 34). It is perhaps no coincidence that the earliest monuments were built in areas where the woods offered less resistance to clearance by fire. Clearance work may have exploited, maintained and expanded naturally occurring gaps in the tree cover caused by lightening strikes and may have been well-established and long-lived by the time monument construction began.

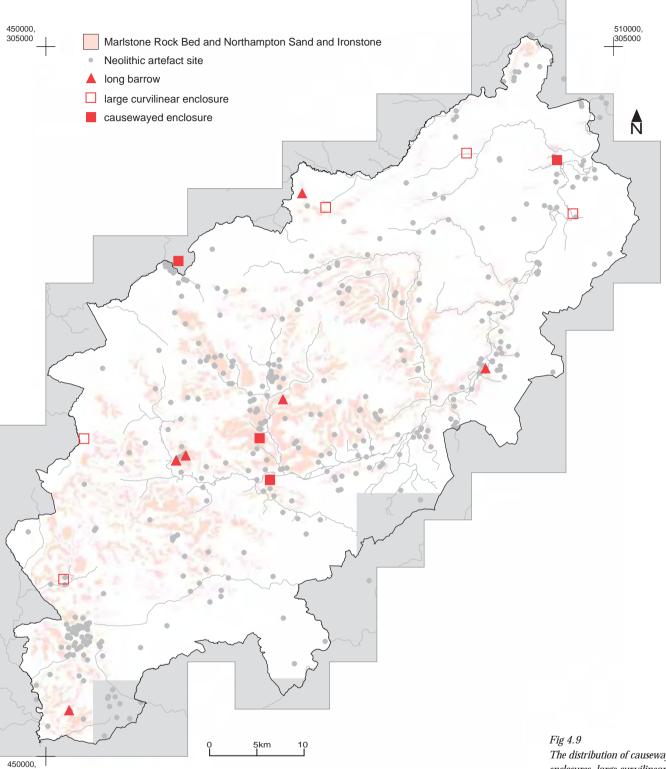
The interpretation of the Hardingstone ditches as a short cursus monument is a cautious one. The immediate vicinity of the feature has been developed or quarried, thus removing any clues that may have been gained from seeing its wider prehistoric context. What is known is that the surviving long ditches run perpendicular to the present course of the Nene, which lies some 400m to the north. The closest known early Neolithic monument is the causewayed enclosure at Briar Hill, 3km to the east.

Like the short cursus at Barnack, Cambridgeshire, both the Grendon and Cosgrove A long enclosures lie on the valley floor. Their environs are now alleviated, but they were probably built on low gravel islands that are now less-deeply buried than the surrounding terraces. The Barnack and Grendon examples lie parallel to the general trend of the modern river courses, but the Cosgrove A enclosure runs perpendicular to the Great Ouse.

Whereas most of the long barrows are relatively isolated features. the enclosures are commonly found in association with other monument types. The Grendon long enclosure is aligned with the mortuary enclosure within Barrow V. although unfortunately the former is not dated (Gibson and McCormick 1985, fig 1). Another possible mortuary enclosure lies within 100m of the Cosgrove A example, in association with two ring ditches, while other monuments may be masked by the alluvium, and as a consequence may be better preserved than these cropmarked features.

The elongated enclosure at Ketton A, Rutland is part of a dispersed complex of Neolithic and Bronze Age monuments and later land divisions. This enclosure lies at the edge of the valley bottom, in alignment with the general course of the River Welland. The Walcote and Dodford long enclosures also run parallel to local water courses, but the latter example is located slightly higher up the valley side than the other examples.

These long enclosures, like the West Cotton example, and the undated Rivenhall mortuary enclosure in Essex (Buckley *et al* 1986), are concentrated on or close to the valley floor, in spite of the likely underrepresentation of pre-alluviation features in these locations (*see* Fig 4.10). In general the long enclosures do not occur in the same places as most of the known long barrows; even at Raunds the Redlands Farm Long



Barrow and the later Long Enclosure are separated by a distance of some 1.75km. There appears to be a distinct spatial separation of these monuments with the long barrows occupying the valley sides, often on

false crests, and the long enclosures running alongside the rivers on the valley floors.

All three of the excavated mortuary enclosures are located on or close to the valley floor of the Nene, as are the possible The distribution of causewayed enclosures, large curvilinear enclosures, long barrows, Neolithic flint scatters and the Marlstone Rock Bed and Northampton Sand and Ironstone (NCC SMR; Hall 1985; D Hall pers comm).

examples at Flore D, Elton A, Cambridgeshire, and at Ketton B, Rutland. The possible mortuary enclosure at Cosgrove B is located alongside the long enclosure (Cosgrove A) on the valley floors of the Great Ouse, but, by contrast, the Naseby example is sited in one of the higher parts of the county on the watershed between the Nene and the Avon catchments, among a varied group of ring ditches.

There appears to be a significant relationship between the long enclosures and the mortuary enclosures. They occur together at Ketton A and B, Grendon, and Cosgrove A and B, and also occupy similar parts of the landscape. Within each site, however, the chronological relationship is unclear. The mortuary enclosures appear to have served a similar function to the long barrow, but, like the long enclosures, they appear on the whole to occupy different landscape zones.

The West Cotton Causewayed Ring Ditch is the only reported excavated example of its kind. It was apparently near contemporary with the Long Enclosure, yet the distribution of the NMP sample suggests that this form was considerably more numerous and widespread than the other Early to Middle Neolithic monuments (see Table 4.4). It may well be an oversimplification to consider all cropmarks as indicators of a uniform monument type and further excavations are required to understand the role of the causewayed ring ditches within Neolithic and Bronze Age landscapes of Northamptonshire.

Late Neolithic and Bronze Age monuments

There is a varied group of large ring ditches and possible henge monuments that is widely distributed across the landscape of the project area (Fig 4.10 and Appendix 2). The unusual, and undated, large, mounded ring ditch at Grendon lay on the valley floor in an area also occupied by ring ditches and a multi-ring ditch. Significantly the multi-ring ditch is recorded as overlying a possible field boundary, which may indicate that the area had been cleared and partitioned for stock grazing prior to the construction of these monuments.

The large ring ditch at Stanwick is similarly located on the valley floor, and the Elton henge sits within a broad river meander where the valley widens towards the fen. Aside from the internal enclosures and the associated ring ditch and pits, Elton henge is apparently isolated, although other monuments may be masked by alluvium. In contrast, the Stanwick large ring ditch is located within 200m of both the undated Southern Enclosure and the Segmented Ditch Circle and Avenue. At the time at which the large ring and henge monuments were being constructed, in the Middle to Late Neolithic, the early 4th millennium BC Avenue had long been abandoned, although it was probably still perceptible when the Segmented Ditch Circle was cut into its southern end in the Early Bronze Age (Healy et al 2007, 147).

In the Cherwell Valley the Kings Sutton henge sits on the Lias Upper Ground above the valley, some 2.5km down-slope from the Rainsborough long barrow. In common with the West Cotton 'henge', several of the henges and large ring ditches are located just above the floor of a major valley along the sides of minor valleys. The Lamport and Misterton ring ditches appear to be isolated. The Holcot and Earls Barton examples are associated with ring ditches.

The Dallington, Shawell, Staverton B and C and the Naseby large rings or henges occupy more elevated positions, although at Dallington this is only a minor, localised advantage. The Dallington henge is located at the centre of the causewayed enclosure and either cuts or is cut by a large oval enclosure. The Shawell rings sit on a low spur, alongside other small ring ditches overlooking the Misterton large ring ditch on the opposite side of a small valley. The egg-shaped, multi-ditched enclosure at Staverton C occupies a commanding position near the source of the Nene, facing down the valley. This site is on the shoulder of the watershed, between Studborough and Big Hills, which leads into the neighbouring river valley.

The large rings at Naseby and Staverton B sit on north-west-facing slopes just below two of the highest points in the county. Both are found in conjunction with numerous ring ditches, including multi-ring ditches and causewayed ring ditches. A possible mortuary enclosure and a rare triple-ditched ring are also known within 100m of the Naseby example.

The analysis of the monuments in the RAP identified a shift of focus in the early 3rd millennium BC to the valley sides, concurrent with an apparent lull in construction on the valley floor (Harding

Fig 4.10 (opposite)
The distribution of long
enclosures, mortuary
enclosures, oval enclosures,
henges and large ring ditches
and Neolithic records (after
NCC SMR, Hall 1985 and
D Hall pers comm).

and Healy 2007, table 5.1). Within the RAP this trend is expressed by the building of the West Cotton henge away from the extensive valley floor monument complex. The large ring at Stanwick may have been built on the

valley floor at this time, but it is in an area that was apparently under-used after the abandonment of the Avenue until the construction of the Segmented Ditch Circle. If they are taken to be broadly

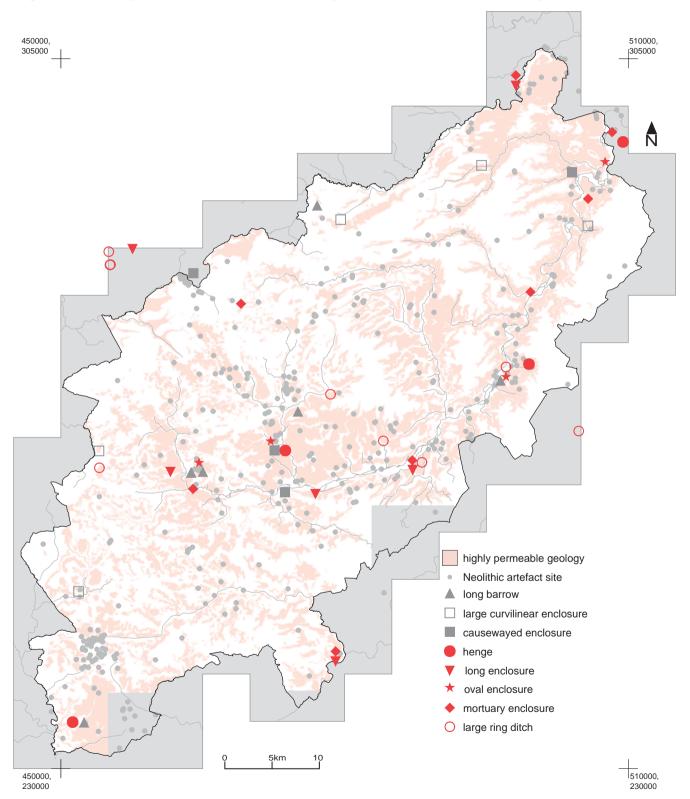
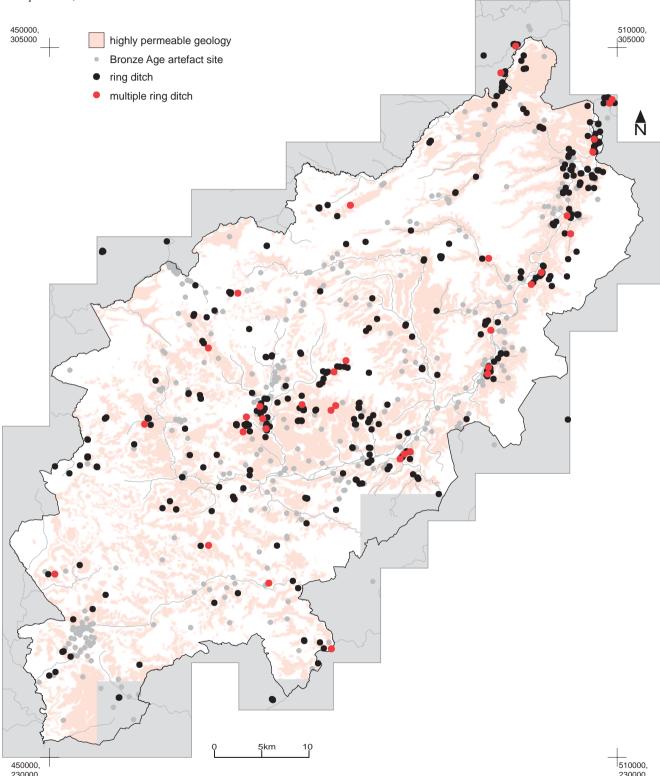


Fig 4.11
The distribution of simple ring ditches, multi-ring ditches and Bronze Age records (SMR; Hall 1985; D Hall pers comm).

contemporary then the location of most of the henges and large ring ditches also reflect this trend on a wider scale across the county (*see* Fig 4.14). As observed by Harding and Healy, at Dallington this shift is also a return to the site of earlier activity: the construction and use of the causewayed enclosure (2007, 281). At Briar Hill, recutting of the causewayed enclosure pits was increasingly concentrated on the more



circular, inner circuit, and activity was subsequently focussed on the interior of that enclosure with the construction of a timber structure. Bradley has already observed that the circularity of the inner enclosure, as at Flagstones, Dorset, and Stonehenge 1, preempted the henge monuments (2002, 79).

Ring ditches are by far the most ubiquitous of Neolithic and Bronze Age monuments recorded by the project, and they have a much wider distribution than any of the monument types discussed so far (Fig 4.11).

The majority of the ring ditches are probably of Early to Middle Bronze Age date but a proportion may have been constructed earlier or had foundations. Chapman has suggested that the 'larger than average ring ditches', like those around the Tansor and Aldwincle mortuary enclosures, may have Neolithic origins (1997, 17). The sample of investigated ring ditches is inconclusive in this respect (see Appendix 1). Eleven rings ditches with diameters in excess of 28m have been excavated, including the unusual and undated mounded or kerbed ring ditch at Grendon. Certainly the Tansor ring ditch was based on an earlier structure, but the produced ditch spurious radiocarbon date and Beaker sherds were recovered from the secondary (Chapman 1997, 13). At Aldwincle a Neolithic date is suggested for Site 3, which is nearly 28m in diameter, but also for Site 4, which is only 22m wide. Moreover Barrows 1 and 2 at that site, approximately 36m and 30m, respectively, are in the Beaker tradition (Jackson 1976a, 41 and 30). Barrow 4 at Irthlingborough, was 29m in diameter and firmly dated to the Bronze Age (Healy et al 2007, 185). The 32m ring ditch within the henge at Maxey has been dated to the Neolithic, although there was no indication that it had a burial function (Pryor 1985, 70).

Of the simple cropmarked ring ditches, 91 are between 28m and 45m in diameter. If only one in two of these examples had Neolithic origins this would more than double the number of Neolithic monuments known from Northamptonshire.

Only 8% of all the cropmarked ring ditches have more than one visible circuit; in contrast, multi-ring ditches constitute over 25% of the ring ditches and barrows investigated at Raunds. The preponderance of these monuments at Raunds is suggested to indicate the special significance of the area

and possibly of the rich and elaborate Barrow 1 in particular (Harding and Healy 2007, 281—3). However, this project's sample may significantly under-represent multi-ring ditches because, as discussed above, multiple circuits may not be discernible in the cropmarks where there is little or no intervening berm between ditches.

Woodward has suggested that the double-ring ditches acted as a foci for later cemetery expansion (1986, 7). He observed that the Early Bronze Age ring ditches in the Great Ouse Valley were rarely greater than 23m in diameter and that when other larger barrows were built near by the smaller, earlier monuments were re-modelled with supplementary ditches and modified mounds. Analysis shows that the inner circuits of the Northamptonshire multiple ring ditches are smaller than the average (see above), but there is insufficient welldated evidence to link this characteristic firmly to the Early Bronze Age. It is perhaps more significant that excavations in Northamptonshire and beyond have demonstrated that multiple ring ditches are often the simple cropmark expression of monuments of great longevity and complexity, often with origins in the Neolithic (see Table 4.2).

At Raunds the multi-ring ditches fall into three spatially distinct groups: Barrows 1-3 on Irthlingborough Island, those clustered around the Long Mound and Long Enclosure, and, at the very edge of the area, Barrow 9. All are found in association with simple ring ditch forms. Countywide, 24 of the 40 multi-ring ditches occur singly, but 19 of those occur in association with one or more simple ring ditches. Twelve of the examples are paired: one pair occurs alone, while the others are among groups of between 3 and 11 simple ring ditches. At Sutton, Cambridgeshire, there is a group of four multi-ditched rings in conjunction with two large circular pit-like features and a simple ring ditch.

Multi-ring ditches are present at the three locations where long and mortuary enclosures are found together: Cosgrove A and B; Ketton A and B; Grendon; and near the possible mortuary enclosure at Naseby. At West Cotton, the Double Ring Ditch, Barrows 5 and 6, and Ring Ditch 5 are clustered to the north-east and south-west of earlier monuments (the Long Enclosure, Long Mounds and the Turf Mound).

It might be expected that if a substantial proportion of the larger ring ditches and multi-ring ditches were of Neolithic date, then the distribution of these features would mirror that of other monuments of that period, but Table 4.4 suggests that this is not the case. In general the distribution of multi-ring ditches and larger ring ditches is closer to that of the smaller simple ring ditches, which are presumed to be mostly of Early to Middle Bronze Age date.

On the whole there are no large cemetery groupings of ring ditches, even where they are most prolific, such as in the wide, shallow valley downstream of Irthling-borough. Undoubtedly this is in part due to the fragmentary nature of exposed gravel terraces, but it is perhaps surprising that complexes like the closely-spaced linear barrow cemetery at Barrow Hills appear to be absent from the county.

Simple ring ditches are common around the long enclosures, mortuary enclosures and multi-ring ditches, but sparser around the causewayed enclosures and long barrows. There are relatively few examples of ring ditches intersecting other enclosures and thus, if the presumed phasing is correct, of barrow mounds being built over parts of earlier monuments, so it is interesting to note where this does occur. A ring ditch was cut into the northern section of the Ketton A long enclosure, and the ring ditch of the barrow built over the mortuary enclosure clips its northern tip. At Fotheringhay the circuit of a large oval enclosure intersects with another ring ditch.

Similar arrangements are known from Cambridgeshire and Essex. At the Octagon Farm 'ceremonial complex', a ring ditch (Cambridgeshire SMR 1480–29) overlies the north-eastern end of a long enclosure that is thought to be a cursus (Malim 2000, fig 8.13). In the same complex, another ring ditch (Cambridgeshire SMR 1480–3) straddles the ditch of one of the large, rectangular mortuary enclosures.

Strachan *et al* observed five cases of superimposition in the Stour Valley area, three involving the intersection of a circular monument with an elongated or 'subelongated' enclosures (2000, 22–3). The two examples illustrated at Long Melford are reminiscent of the arrangements at Ketton and Fotheringhay (2000, fig 18). According to Strachan *et al*, the later monuments were built 'without respecting the former monument, and presumably involving partial or total destruction' (2000, 22). There is evidence from excavation that these relationships are more

complex and may each represent quite different scenarios. At Stanwick the Segmented Ditch Circle was cut into the southern end of the short-lived Avenue some 19 centuries after the latter's construction (Healy et al 2007, 147). Presuming the latter survived as a shallow earthwork and that this positioning was not merely a coincidence, it is difficult to reconcile the insertion of the Segmented Ditch Circle with an act of disrespect and destruction. Similarly the act of raising mounds over the mortuary enclosures at Tansor. Aldwincle and Grendon is generally considered to be an enhancement rather than defacement of the earlier monuments.

The intersection of Barrow 6 with the Ditched Enclosure at West Cotton demonstrates how complex this apparently simple arrangement can be (Harding and Healy 2007, fig. 4.1). Initially built as two separate monuments, the final enlargement of the Barrow 6 ditch and mound encroached upon the Ditched Enclosure. The resultant 'lens-shaped' segment shared between them became a focus for cremations, but later the ditches dividing the two were slighted to create one figure-ofeight-shaped monument. The Ketton A long enclosure or Fotheringhay oval enclosure may have undergone similarly complex modifications.

Most of the Bronze Age round barrows at Raunds were constructed within a 250–500 year period, the latest being built in the first quarter of the 2nd millennium BC (Healy *et al* 2007, 173–9). If nothing else, the distribution of ring ditches indicates just how extensive woodland clearance must have been by the Middle Bronze Age and how this had been achieved over a relatively short period.

At Raunds some mound enlargement and refurbishment continued and further cremations were inserted in an around the monuments throughout the 2nd millennium BC (Healy *et al* 2007, 173–9). Evidence for Late Bronze Age funereal activity elsewhere in the county is sparse compared to the profusion of ring ditches that survive from the preceding centuries. Only three cremation cemeteries of any size have been identified in the county and all were unknown prior to excavation (Chapman 1999).

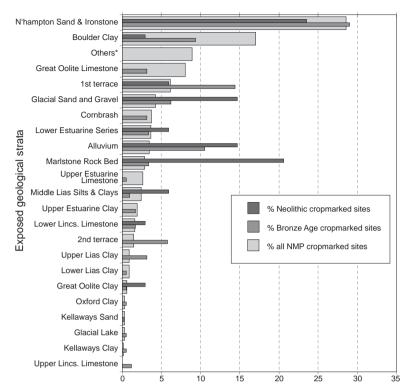
In the late 2nd millennium BC, perhaps even while some barrows were still receiving cremations, others were being used as markers in the planning of a system of fields and droveways at Stanwick and West Cotton (Healy *et al* 2007, 191–4). There is even evidence from other sites, although it is slight, that land division may have been initiated prior to the construction of some barrows. Both the double ring ditch (F14/15) at Grendon and a ring ditch at Brackmills Link Road cut possible linear ditches (Jackson 1997, 5; NA 1999a, 6–7).

The distribution of the evidence

Chapter 3 investigated the biases inherent in the distribution of cropmarked features in Northamptonshire and concluded that the permeability of the underlying geology was a significant factor. As only a verv small number of the Neolithic or Bronze Age sites survive as earthworks or appeared as soilmarks, so it may be expected that the distribution of these sites is similarly biased. If visibility were the only factor determining the known distribution of early monuments then the number recorded on each geologic type might be expected to be proportionate to the overall number of cropmarks on each geologic type. Figure 4.12 demonstrates that this is not the case, and it is likely that variations from the overall cropmark distribution reflect the preferences of the monument builders for particular locations.

As discussed above, there is a striking correlation between the distribution of many of the earliest monuments and that of well-drained acidic soils, although the significance of this could be overstated given the small sample size. As Figure 4.12 shows, a disproportionately high percentage of Neolithic monuments were built on the Marlstone Rock Bed, although their relationship to the Northampton Sand and Ironstone is more proportionate to that of all cropmark sites. The apparent preference for the Marlstone Rock Bed in the Neolithic is not repeated in the Bronze Age data.

The first and second terrace river gravels have produced more Bronze Age monuments than the overall cropmark distribution would suggest, indicating that these may have been favoured locations for monuments building. There are also significantly high proportions of Bronze Age ring ditches in areas mapped as alluvium, and an even higher proportion of Neolithic monuments are recorded there. It is important to remember that monuments in these locations were constructed on river



Percentage of objects on exposed strata

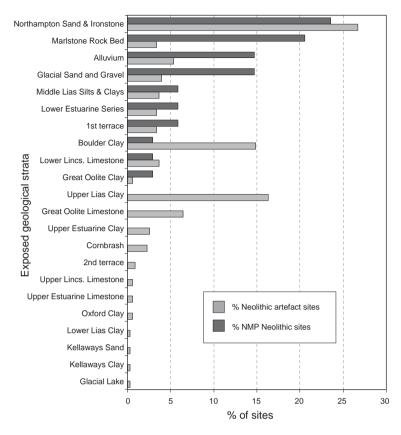
gravel terraces that were not covered by alluvial deposits until a much later date.

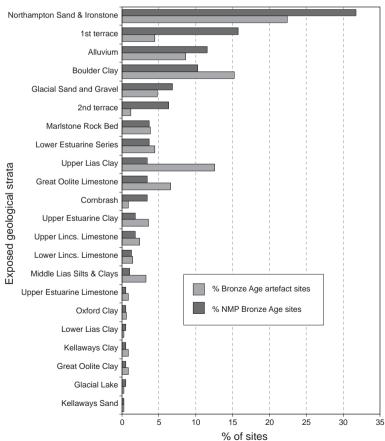
The chart suggests that because relatively few early monuments have been recorded on the Great Oolite Limestone and Upper Estuarine Limestone most cropmarks found there are probably of Iron Age or Roman date. Cropmark sites of all dates are sparser on the highly permeable Upper Lincolnshire Limestone and Lower Lincolnshire Limestone, which may reflect a real aversion to these areas, perhaps because of the scarcity of surface water.

The heavy soils of the boulder clays cover a substantial proportion of the county and have produced 17% of all cropmarks sites, although the distribution of those sites is highly inconsistent. However, just 9% of Bronze Age ring ditches and only 3% of Neolithic monuments were recorded on the boulder clay. The highest proportion of boulder clay cropmarks are on the Nene–Great Ouse interfluve and in the area of Rockingham Forest, but it is clear that the majority of these sites are Iron Age or later in date.

As discussed above, the known artefact spots and scatters are rarely coincident with known monuments. Comparing proportions of artefact sites and known monuments on each geological outcrop highlights some

Fig 4.12
The distribution of ring ditches and other Neolithic and Bronze Age monuments compared to that of all cropmark sites by geology (sample sizes: Neolithic = 34, Bronze Age = 418 & all cropmark = 10744).





interesting differences (Figs 4.13 and 4.14). Clearly, the Neolithic flint scatters, and the activities from which they originated occurred over a wider range of geologies than were used for monument building and use (or are visible on). In contrast ring ditches are present on all geologies where Bronze Age artefacts have been recovered, and overall the number of monuments and artefact sites is more proportionate.

The largest proportion of known Neolithic and Bronze Age monuments are found on the Northampton Sand and Ironstone, and so are the highest proportion of artefacts from those periods. By contrast, nearly a fifth of Neolithic monuments are found on the Marlstone Rock Bed, while fewer than 4% of artefacts come from this geology. Similarly, a quarter of Neolithic monuments are found in areas of alluvium, but this has yielded only 5% of all Neolithic artefacts. This is perhaps because the Neolithic ground surface, and any artefacts that lie on it, are buried under deposits of alluvium, but the monuments may be buried sufficiently shallowly to produce cropmarks.

Nearly a third of Neolithic artefacts reported by the SMR and Hall have been recovered from the boulder clay and Upper Lias Clay. However, only one Neolithic monument has been identified on the former and none on the latter. These geologic types do produce cropmarks, but reluctantly and inconsistently. Moreover the apparent high incidence of Neolithic artefacts on boulder clay and Upper Lias Clay may well be misleading. Most of these scatters are documented in the NCC SMR rather than by Hall, and thus do not include the more accurate field observations regarding soil conditions made by Hall. These figures may also be biased by the inclusion of flints found in the largely clay-covered parish of Marston St Laurence, which Hall has already noted were actually collected over a period of some 20 years, and probably do not represent settlement or other related activities. Similarly, the Great Oolite Limestone was apparently avoided by Neolithic monument builders, but not excluded from the activities that produced flint scatters.

Conclusion

Aerial photographic data has exceeded the potential attributed to it by Chapman (1999) by populating the county with a larger and more diverse range of Neolithic and Bronze Age monuments than was previously

thought. Moreover, with the firm basis of evidence from excavation, particularly at Aldwincle and the RAP, together with the NCC datasets it has been possible to demonstrate some broad trends in monument building through these periods.

The builders of the earliest monuments chose free-draining soils, possibly in preexisting openings or where burning could hasten clearance. Soon after, corridors were opened and new and diverse monuments were built on the gravels of the valley floor. Sequences of clearance, monument building, abandonment and refurbishment were repeated along the valley, creating a mosaic environment of woodland, grassland and regenerated shrub. Towards the end of the Neolithic emphasis shifted away from the valley bottom to the valley sides, minor valleys and even on the plateaux. The new large circular enclosures were built in more diverse locations. but some activity continued at the older sites. At the end of the Neolithic and through the Bronze Age there was an explosion in monument building,

which must have been accompanied by an upsurge in woodland clearance. Towards the middle of the Bronze Age barrow building ceased, although the existing monuments continued to be used for burials. At the same time there is evidence that land division and stock management superseded mon-ument building as the principal earth-moving activity along the valley bottom.

It is tempting to see differences in the distribution of monuments and artefacts as evidence for the conscious separation of tasks. However, the resolution of both the cropmark and the finds data, particularly in the aspect of dating, is far too crude to develop such an idea further. At most, it suggests that monument construction in the Neolithic was limited to a far more restricted zone than settlement farming. The more even distribution of Bronze Age ring ditches and artefacts indicates that, if such preferences were still exercised, they were expressed at a more local level and cannot be reduced to the broad divisions of geology.

Fig 4.13 (opposite)
Comparison of the
distribution of Neolithic
monuments and artefact sites
by geology (SMR; Hall
1985; D Hall pers comm).

Fig 4.14 (opposite)
Comparison of the
distribution of Bronze Age
monuments and artefact sites
by geology (SMR; Hall
1985; D Hall pers comm).

Appendix 4.1 Excavated or investigated ring ditches and round barrows

Bedfordshire

- 1 Ring ditch A, Roxton, Bronze Age: ring ditch = 25m (Taylor and Woodward 1985, table 1)
- 2 Ring ditch B, Roxton, Bronze Age: ring ditch = 24m (Taylor and Woodward 1985, table 1)
- 3 Ring ditch C, Roxton, Bronze Age: ring ditch = 23m (Taylor and Woodward 1985, table 1)
- 4 Ring ditch D, Roxton, Bronze Age: ring ditch = 29m (Taylor and Woodward 1985, table 1)
- 5 Ring ditch E, Roxton, Bronze Age: ring ditch = 27m (Taylor and Woodward 1985, table 1)

Buckinghamshire

6 Ravenstone, Beaker: ring ditch = 8.5m (Allen 1981, fig 3)

Cambridgeshire

7 Ring ditch, Maxey, Neolithic: ring ditch = 32m (Prior 1985)

Northamptonshire

- 8 AML site 1 (NH387.6.1), undated: ring ditch = 20m
- 9 AML Site Flat Top (NH387.8.1), undated: ring ditch = 28m
- 10 Barrow 1, RAP, 2140–1800 cal BC: inner ring ditch and mound = 15.5m (Healy *et al* 2007, 153 and fig 3.96)
- 11 Barrow 1, Site 2, Aldwincle, Beaker: Beaker ring ditch (with badly truncated mound) = 36.6m (Jackson 1976, 32)
- 12 Barrow 2, RAP (NH387.13.1), undated: inner ring ditch = 11m (Harding and Healy 2007, 10)
- 13 Barrow 2, Site 2, Aldwincle, Beaker: Beaker ring ditch (with badly truncated mound) = 30.5m (Jackson 1976, 33)
- 14 Barrow 3, RAP (NH387.14.1), 2180–1930 cal BC: inner ring ditch = 21m (Healy *et al* 2007, 148 and fig 3.88)
- 15 Barrow 4, RAP, 2020–1600 cal BC: ring ditch = 29m (Healy *et al* 2007, 165)
- 16 Barrow 5, RAP, before 2140–1880 cal BC?: inner ring ditch = 17m (Healy *et al* 2007, 141 and fig 3.78)
- 17 Barrow 6, RAP, 2140–1890 cal BC: inner ring ditch and mound = 13.25m (Healy *et al* 2007, 130 and fig 3.71)
- 18 Barrow 7, RAP, undated: ring ditch (and inner mound) = 20.25m (Healy *et al* 2007, 169)
- 19 Barrow 8, RAP, undated: ring ditch (and

- inner mound) = 6m (Healy *et al* 2007, 169) 20 Barrow 9, RAP (NH387.7.1), 2150-1950 cal BC: inner ditch = 24m (Healy *et al* 2007, 169, fig 3.112)
- 21 Brackmills Link Road (NH446.93), 1685–1525 cal BC (68% confidence 132789): ring ditch = 20m (Chapman 2003. 5–9)
- 22 Double Ring Ditch, RAP, undated: inner ring ditch = 3m ((Healy *et al* 2007, 136, fig 3.76)
- 23 F13, Field 12, Grendon (NH45.24.2), undated: oval enclosure = 50m (Jackson 1997, 5)
- 24 F14/15, Field 12, Grendon (NH45.24.1), Undated: inner ring ditch = 13m (Jackson 1997, 5)
- 25 F7, Field 12, Grendon (NH45.24.9), Pre-dates context containing biconical food vessels: ring ditch = 9m (Jackson 1997, fig 2)
- 26 Field D, Upton (NH451.16.1), Neolithic or Iron Age: ring ditch = 23m (Jackson 1994, 74 but no diameter given so measured from NH451.16.1)
- 27 Floodplain, Upton (NH451.22.1), undated: round barrow mound (no ditch) = 27m (Jackson 1994, 73)
- 28 Irchester Quarry, 3300-2580 cal BC (95% confidence Beta 102248) or late Beaker: ring ditch = 15m (Chapman 2003, 3-5)
- 29 Mortuary enclosure, Site 1, Aldwincle, Neolithic: Inner ring ditch = 18.6m (Jackson 1976, 20)
- 30 Mound 1. Tansor Crossroads (NH427.3.1), Late Neolithic/ Early Bronze Age: ring ditch = 35m (Chapman 1997, 13) 31 RAP F192143, undated: ring ditch = 23m (Healy *et al* 2007, 147)
- 32 Ring ditch 1/AML M5, R9, R10, RAP, undated: ring ditch = 20m (Harding and Healy 2007, fig 1.4)
- 33 Ring ditch 2/AML M4, R8, RAP, undated: ring ditch = 22m (Harding and Healy 2007, fig 1.4)
- 34 Ring ditch 3/AML M6, RAP (possibly NH. 389.6.1), undated: ring ditch = 24m (Harding and Healy 2007, fig 1.4)
- 35 Ring ditch 4/AML M7, RAP (NH389.6.2), undated: ring ditch = 22m (Harding and Healy 2007, fig 1.4)
- 36 Ring ditch 5, RAP, undated: outer ring ditch = 10 (Harding and Healy 2007, fig 1.4)
- 37 Ring Ditch I, Area B, Grendon (NH45.20.15), Early Bronze Age: inner ring ditch = 21m (Gibson and McCormick 1985, 28 and 60–5)

- 38 Ring Ditch II, Area D, Grendon (NH45.20.8), Early Bronze Age: ring ditch = 26m (Gibson and McCormick 1985, 31 and 60-5)
- 39 Ring Ditch III, Area B, Grendon, Early Bronze Age: ring ditch = 10m (Gibson and McCormick 1985, 31 and 60–5)
- 40 Ring Ditch IV, Area A, Grendon (NH45.20.18), Early Bronze Age: ring ditch = 20m (Gibson and McCormick 1985, 32 and 60-5)
- 41 Ring Ditch V, Area C, Grendon (NH45.20.1), Early Bronze Age: inner ring ditch = 26m (Gibson and McCormick 1985, 35 and 60–5)
- 42 Ring Ditch VI, Area G, Grendon (NH45.20.5), Early Bronze Age: ring ditch = 17.5m (Gibson and McCormick 1985, 35 and 60–5)
- 43 Ring Ditch VII, Field 15, Grendon (NH45.27.1), Undated: ring ditch = 20m (Jackson 1997, 5)
- 44 Ring ditch, Earls Barton (NH44.1.1), Bronze Age: ring ditch = 39m (Jackson 1984, 7)
- 45 Segmented Ditch Circle, RAP, 2020–1680 cal BC: = 8.5m ((Healy *et al* 2007, 147)
- 46 Site 3. Aldwincle, Neolithic: ring ditch = 27.5m (Jackson 1976, 34)
- 47 Site 4. Aldwincle, Neolithic: ring ditch = 22m (Jackson 1976, 39 and 41)
- 48 The Causewayed Ring Ditch, RAP (NH389.4.1), 3340–3020 cal BC: ring ditch = 23m (Healy *et al* 2007, 98)

Oxfordshire

- 49 Newnham Murren, Neolithic: inner ring ditch = 19m (Moorey 1982, 56)
- 50 Radley 15, Barrow Hills, Beaker: inner ring ditch = 21m (Riley, 1982 76)
- 51 Ring Ditch 15, Standlake, Late Neolithic/ Early Bronze Age: ring ditch = 29m (Catling 1982, 88)
- 52 Ring Ditch 16, Standlake, Late Neolithic/ Early Bronze Age: ring ditch = 22.5m (Catling 1982, 91)
- 53 Ring Ditch 17, Standlake, Late Neolithic/ Early Bronze Age: ring ditch = 32m (Catling 1982, 93)
- 54 Ring Ditch 19, Standlake, Late Neolithic/ Early Bronze Age: ring ditch = 36.5m (Catling 1982, 93)
- 55 Ring Ditch 20, Standlake, Iron Age: Inner ring ditch = 10m (Catling 1982, 97)
 56 Ring Ditch XXIII 2, Stanton Harcourt, Middle Bronze Age: ring ditch = 23m (Linington 1982, 86)

57 Ring Ditch XXIX 1, Stanton Harcourt, Bronze Age: ring ditch = 21m (Linington 1982, 81)

58 Ring Ditch XXIX 3, Stanton Harcourt, Bronze Age: ring ditch = 11.5m (Linington 1982, 83-4)

59 Ring Ditch XXIX 4, Stanton Harcourt, Bronze Age: ring ditch = 12m (Linington 1982, 85–6)

Appendix 4.2 Monument types

Format: parish (site name), county (if not Northamptonshire): monument type, suggested date, (MORPH2.2 reference or source photograph number); physiographic location (after NAA 2003); dimensions; Notes; (bibliographic reference); figure number in this volume.

Curvilinear enclosures

- 1 Bulwick: large curvilinear enclosure, Early Neolithic? (SP9493/002); valley side; length 195m, width min 150m; Fig 4.2: 7.
- 2 Chipping Warden: large curvilinear enclosure, Early Neolithic? (NH345.18.14); Lias upper ground; length 170m, width 125m; Fig 4.2: 5.
- 3 Husband's Bosworth, Leicestershire: causewayed enclosure, Early Neolithic; valley side; internal area 1.5ha. Bulge in north-east quadrant (Butler *et al* 2002); Fig 4.2: 4.
- 4 Northampton (Briar Hill): causewayed enclosure, Early Neolithic (NH452.11.1–2); Ironstone upper ground; length (internal to the outer circuits) 155m, width (internal to the outer circuits) 145m, diameter (internal to the inner circuit) 86m. Comprises an outer oval-shaped enclosure of two causewayed circuits and an inner subcircular enclosure with interrupt ditch circuit (Bamford 1985); Fig 4.2: 3.
- 5 Northampton (Dallington): causewayed enclosure, Early Neolithic (NH461.8.1); Lias upper ground; length 280m, width 225m. Bulge in south-east quadrant; Fig 4 2: 1
- 6 Polebrook: Large curvilinear enclosure, Early Neolithic? (NH400.21.1); valley side; length *c* 125m, width *c* 110m; Fig 4.2: 6.
- 7 Southwick: causewayed enclosure, Early Neolithic (NH9.14.1); valley floor; length 180m, width min 125m; Fig 4.2: 2.
- 8 Staverton A: large curvilinear enclosure, Early Neolithic? (NH18.1.1); valley side;

length min 45m, width 37m; Fig 4.2: 8. 9 Stoke Albany: large curvilinear enclosure, Early Neolithic? (NH181.8.1); valley side; length min 120m, width 75m; Fig 4.2.9.

Elongated enclosures

- 10 Cosgrove A: long enclosure, Middle to Late Neolithic? (NH289.1.1); valley floor; length min 56m, width 15m. Elongated enclosure with square ends; Fig 4.3: 18.
- 11 Dodford: long enclosure, Middle to Late Neolithic? (NH465.6.1); valley side; length min 96m, width 24m; Fig 4.3: 22.
- 12 Grendon (Grendon Quarry): long enclosure, Middle to Late Neolithic? (NH45.20.22); valley floor; length 84m, width 17m. Excavated monument: elongated enclosure with square ends (Jackson 1997); Fig 4.3: 17.
- 13 Hardingstone: long enclosure, Early Neolithic? (NH448.2.1); valley side; length min 130m, width 30m; Fig 4.3: 19.
- 14 Ketton A, Rutland: long enclosure, Middle to Late Neolithic? (SK9702/020); valley floor; length 97m, width 10m. Elongated enclosure with rounded ends; Fig 4.3: 20.
- 15 Raunds (Long Mound): long mound, Early Neolithic; valley floor; length 135m. Excavated monument (Healy *et al* 2007, 54–64); Fig 4.3: 15.
- 16 Raunds (The Avenue): avenue, Early Neolithic?; valley floor; length 60m, width min 7m. Excavated monument (Healy *et al* 2007, 64–7); Fig 4.3: 16.
- 17 Raunds (The Long Enclosure): long enclosure, Middle to Late Neolithic; valley floor; length 117m, width 17m. Excavated monument (Healy *et al* 2007, 94–8); Fig 4.3: 14.
- 18 Walcote, Leicestershire: long enclosure? Middle to Late Neolithic? (SP5785/003); valley side; length 98m, width 17m. Elongated enclosure with rounded ends; Fig 4.3: 21.

Elongated monuments

- 19 Chipping Warden (Wallow Bank): long barrow?; Early Neolithic? Lias upper ground; length 32m, width 13m. Earthwork mound, no date or function attributed by RCHM(E) field investigation (1982, 32); not illustrated.
- 20 Flore A: long barrow, Early Neolithic? (NH466.12.2); Lias upper ground; length 42m, width 10m; Fig 4.3: 1.
- 21 Flore B: long barrow, Early Neolithic?

(NH466.12.1); Lias upper ground; length 61m, width 18m; Fig 4.3: 1.

22 Flore C: long barrow, Early Neolithic (NH466.20.1); Lias upper ground; length 30m, width 21m; Fig 4.3: 2.

23 Newbottle: long barrow? Early Neolithic? (NH236.16.1); Lias upper ground; length 30m, width 4m. Earthwork mound, no date or function attributed by RCHM(E) field investigation (1982, 105); not illustrated.

24 Pitsford (Longman's Hill): long barrow? Early Neolithic? (NH471.8.1); Ironstone upper ground; length 17m, width 5m. Earthwork mound: site of antiquarian investigation, provenance not confirmed (RCHME 1981, 161–2); Fig 4.3: 3.

25 Raunds (Redlands Farm Long Barrow): long barrow, Early Neolithic; valley floor; length 50m. Excavated monument (Healy *et al* 2007, 73–80); Fig 4.3 4.

26 Sutton Bassett: long barrow? Early Neolithic? (NH140.1.1); valley side; length 40m, width 30m. Possible enclosed long barrow? Fig 4.3: 5.

Rectilinear enclosures

27 Aldwincle (Henslow Meadow): mortuary enclosure, Middle to Late Neolithic; valley floor; length 13.7m, width 10.7m. Excavated monument (Jackson 1976); Fig 4.3: 7. 28 Cosgrove B: mortuary enclosure? Middle to Late Neolithic? (NH289.1.3); valley floor; length 23m, width 22m; Fig 4.3: 13. 29 Elton A, Cambridgeshire: mortuary enclosure, Middle to Late Neolithic (TL0896/008); valley floor; length 20m, width 10m. Rectilinear enclosure within a ring ditch; Fig 4.3: 9.

30 Elton B, Cambridgeshire: rectilinear enclosure, Neolithic? (TL0896/018); valley side; length min 65m, width 35m. Possible Neolithic enclosure located within a henge monument; Fig 4.5: 6.

31 Flore D: mortuary enclosure? Middle to Late Neolithic? (NH457.23.1); valley side; length 19m, width 16m; Fig 4.3: 12.

32 Grendon (Ring Ditch V, Grendon Quarry): mortuary enclosure, Middle to Late Neolithic (NH45.20.2); valley floor; length 16m, width 14m. Excavated monument (Gibson and McCormick 1985); Fig 4.3: 8.

33 Ketton B, Rutland: mortuary enclosure? Middle to Late Neolithic? (SK9802/046); valley floor; length 23m, width 16m. Rectilinear enclosure within a ring ditch; Fig 4.3: 11.

34 Naseby A: mortuary enclosure? Middle to Late Neolithic? (NH507.43.3); Lias upper ground; length min 22m, width 20m Fig 4.3: 10.

35 Tansor (Mound 1, Tansor Crossroads): mortuary enclosure, Middle to Late Neolithic; valley floor/valley side; overall dimensions unknown. Partially excavated monument (Chapman 1997): the ring ditch encircling the mortuary enclosure was recorded (NH427.3.1); Fig 4.3: 6.

Circular and sub-circular enclosures

36 Earls Barton: large ring ditch, Late Neolithic/Bronze Age? (NH14.6.1) Ironstone upper ground; diameter 54m; Fig 4.5: 12.

37 Elton C, Cambridgshire: large ring ditch, Late Neolithic/Bronze Age (TL0896/018); valley side; diameter 95m. Partially excavated monument (Taylor 1979); Fig 4.5: 6.

38 Grendon (Grendon Quarry): large ring ditch, Late Neolithic/Bronze Age (NH45.24.2); valley floor; diameter 47m. Partially excavated monument (Jackson 1997); Fig 4.5: 1.

39 Holcot A: large ring ditch, Late Neolithic/Bronze Age? (NH473.27.4); Ironstone upper ground; diameter 57m; Fig 4.5: 15.

40 Holcot B: large ring ditch, Late Neolithic/Bronze Age? (NH473.27.3); Ironstone upper ground; diameter 50m; Fig 4.5: 16.

41 King's Sutton: henge, Late Neolithic /Early Bronze Age (NH237.1.1); Lias upper ground; diameter 67m; Fig 4.5: 7.

42 Lamport: large ring ditch, Late Neolithic/Bronze Age? (NH491.3.1); valley floor; diameter 45m; Fig 4.5: 17.

43 Misterton, Leicestershire: large ring ditch, Late Neolithic/Bronze Age? (SP5583/002); valley side; diameter 55m; Fig 4.5: 18.

44 Naseby B: large ring ditch, Late Neolithic/Bronze Age? (NH507.43.8); Lias upper ground; diameter 85m; Fig 4.5: 10.
45 Northampton (Dallington): large ring ditch, Late Neolithic/Bronze Age (NH461.8.3); diameter max 65m; Fig 4.5: 8.
46 Raunds (Cotton Henge): large ring ditch Late Neolithic/Bronze Age

ditch, Late Neolithic/Bronze Age (NH389.1.1); Lias upper ground; diameter 81m; Fig 4.5: 2.

47 Shawell A, Leicestershire: large ring ditch, Late Neolithic/Bronze Age?

(SP5583/0033); Lias upper ground; diameter 47m. Circular enclosure lying within large ring ditch; Fig 4.5: 11.

48 Shawell B, Leicestershire: large ring ditch, Late Neolithic/Bronze Age? (SP5583/0033); Lias upper ground; diameter 87m. Circular enclosure enclosing smaller ring ditch; Fig 4.5: 11.

49 Raunds (Stanwick): large ring ditch, Late Neolithic/Bronze Age? (NH387.27.1); valley floor; diameter 73m; Fig 4.5: 9.

50 Staverton B: large ring ditch, Late Neolithic/Bronze Age? (NH17.5.1); Lias upper ground; diameter 61m; Fig 4.5: 13. 51 Staverton C: large ring ditch, Late

Neolithic/Bronze Age? (NH352.1.1); Lias upper ground; length (inner circuit) 33m, width (inner circuit) 31m, diameter (outer ring) 63m; Fig 4.5: 14.

52 Swinehead, Bedfordshire: large ring

ditch, Late Neolithic/Bronze Age (TL0465/008); valley side; diameter max 113m; Fig 4.5: 3.

Oval enclosures

53 Flore E: oval enclosure, Neolithic? (NH466.19.1); Lias upper ground; length min 87m, width max 69m; Fig 4.5: 21. 54 Fotheringhay: oval enclosure, Neolithic? (NH431.18.1); yelley floor; length 54m.

(NH431.18.1); valley floor; length 54m, width 33m; Fig 4.5: 20.

Width John, 1718 4.5. 20.

55 Northampton (Dallington): oval enclosure, Neolithic? (NH461.9.1); Lias upper ground; length 96m, width 60m; Fig 4.5: 22.

56 Raunds (Southern Enclosure, Stanwick): oval enclosure, Neolithic (NH387.30.1); valley floor; length min 33m, width 30m. Excavated monument (Healy *et al* 2007, 104–8); Fig 4.5: 19.

5 Tenebris Lux Ex

by Alex Gibson

In 1989, I was privileged to edit *Midlands Prehistory: Some Recent and Current Researches into the Prehistory of Central England* (Gibson 1989). This compilation was, I believe, the first volume to be purely devoted to a regional view of the prehistoric archaeology of the English mid-shires. Francis Pryor and, earlier, the 'Cambridge school' had demonstrated the richness of the neighbouring Fenlands, but the density of archaeological data here did not seem to extend into the fen-feeding valleys.

Conventionally, the region between the Thames Valley in the south, the Fenlands to the east, Wales and the Severn Valley to the west, and the uplands of Derbyshire and the Lincolnshire wolds in the north and northeast had been a virtual desert as far as prehistoric archaeology was concerned. Various theories had been put forward to explain this. The dense forest cover was beyond the clearing capabilities of prehistoric populations, or that the heavy Midlands clay soils were unyielding to the scratching of primitive ards (early ploughs). Others acknowledged that the large tracts of ridge and furrow cultivation over much of the Midlands and the deeply-silted river valleys may well have been rendering extant sites invisible.

By the time *Midlands Prehistory* was published, however, the Raunds Area Project was underway and the excavations at the West Cotton medieval village under Dave Windell had reached prehistoric features. Work on barrows in Leicestershire and Rutland by Patrick Clay, as well as Northamptonshire under Tony McCormick and Dennis Jackson, had produced exciting results. Pippa Bradley was investigating the Charnwood 'axe factory' and Helen Bamford had published the causewayed enclosure at Briar Hill. Trial excavations at cursus mounuments under the direction of myself and Roy Loveday, and of Graeme Guilbert, had taken place at Aston and Potlock. Field-walking had been underway for several years by investigators such as David Hall, and the popularity of this activity was increasing among local groups. Finally, vast amounts of exciting data were being fed into the SMRs by national and local flyers such as St Joseph, Riley, Pickering and Hartley, among others. This list is purely illustrative and by no means exhaustive. During the late 1970s and 1980s the Midlands were almost coming of age archaeologically: they were discovering their prehistoric heritage.

Having come of age, development continued and, in this instance for Northamptonshire, the current state of Midlands prehistory is excellently presented in this report, which admirably integrates the fieldwalking, excavation, geological and aerial photographic data. It can now be seen that the Neolithic and Bronze Age record for Northamptonshire is as rich and diverse as it is elsewhere in lowland Britain. In the Neolithic, the full range of major monument types is present in numbers. Long barrows and the so-called mortuary enclosures may be among the earliest, closely followed by causewayed enclosures, cursus and related elongated monuments, and ring ditches. Henges and hengiforms, possible palisade enclosures, represent the 3rd and 2nd millennia, overlapping with a large range of barrow and ring-ditch forms. In keeping with other areas of Britain, these monuments increase in numbers and distribution through time, suggesting a numerical and geographical expansion of population.

Causewayed enclosures have recently been summarised (Oswald et al 2001), and the Briar Hill, Dallington and Southwick sites, along with those of the upper Trent Valley, the Fens and Husbands Bosworth in Leicestershire, form the northern limits of the distribution of known classic sites. There seems little doubt in the interpretation of these sites, and excavations at Husbands Bosworth and Briar Hill have confirmed their earlier Neolithic origins. The long barrow sites also appear convincing, and once again the excavation at Redlands Farm has provided chronological data. Indeed, it would have been surprising if this monument type had not been recognised in the project area, given its national distribution. The mortuary

enclosures are more difficult to interpret, although their existence, as demonstrated at Aldwincle and Grendon, cannot be denied. Nevertheless the absence of human remains at some excavated sites raises the question, 'when is a mortuary enclosure not a mortuary enclosure?' More trial excavation and geophysical survey on these monument groups is highly desirable.

The cursus and related elongated ditched enclosures are notoriously difficult to define, given that few are known in their entirety, and confusion with other linear features, such as field boundaries or trackways, is a constant danger. The Northamptonshire sites have their riverine locations in common with the national corpus. The way that these monuments functioned in contemporary society is far from understood (papers in Barclay and Harding (eds) 1999; Barclay et al 2003), but given their liminal situations, they may have territorial or boundary implications. This observation is also relevant to some of the monument complexes, such as those encountered in the Nene Valley at Raunds.

Fascinating in this study are the noncausewayed enclosures. Undated these excavation, sites certainly are contenders for Neolithic enclosures and, particularly, the larger palisaded enclosures that are becoming increasingly recognised in British archaeology. One type of these comprises enclosures perimeters contiguous timbers, as at Mount Pleasant or West Kennet in Wiltshire, while another type is formed by a perimeter of close-set timbers such as Hindwell in Powys (see Gibson 2002 for a summary). Both types tend to be recognised from the air as ditchdefined enclosures and field-walking over the Hindwell enclosure, in particular, produced very little cultural material. The enclosures also tend to have upper riverine locations, possibly on formalised route-ways.

At 34ha, the area of the Hindwell enclosure is remarkable, but the other sites range between 1ha and 10ha. Consequently, the Bulwick, Chipping Warden and Polebrook enclosures, in particular, fall well within the expected size Furthermore, West Kennet, Hindwell and Mount Pleasant are broadly circular or oval, but with at least one flattened side, and this is another morphological feature that the Northamptonshire sites share. Clearly only excavation can confirm this tentative identification, but if correct, these palisaded sites span most of the 3rd millennium BC,

broadly contemporary with Grooved Ware and early Beakers. The oval enclosures are also interesting in this light and their morphological similarity suggests a common date and cultural affinity. Once again, one feels that targeted excavation will shed more light on this class.

Henges and related sites encompass a panoply of circular and sub-circular ditched enclosures. The 'mixed bag' nature of the term 'hengiform' has long been recognised in archaeological circles and is epitomised by the corpus compiled by Harding and Lee (1987). Once again, this is within the national trend and one cannot help wonder how much our interpretations may change, given more targeted and detailed study of these monuments.

Round barrows and ring ditches probably make up the majority of single cropmark sites nationally. The Northamptonshire material demonstrates greater exploitation of the county in the 2nd millennium. The multi-period nature of some sites also demonstrates a permanency of place and prolonged interest at some of individual these monuments. prolonged interest may also have manifested itself in other ways, archaeologically invisible except through excavation, such as episodic burial or the re-visiting of earlier burials, as at Irthlingborough. It is becoming increasingly obvious in the study of Bronze Age burials that 'rest in peace' was not a 2nd millennium concept. While the present writer does not agree that multiple ring ditches necessarily always represent enlargement of the site (given the contraction noted in the Four Crosses ring ditch cemetery in Powys (Warrilow et al 1986), and again at Meole Brace, Shropshire (G Hughes pers comm), this quibble clearly does not alter the continued and prolonged nature of many narratives.

One worry of the present writer is that this NMP survey will be regarded as a definitive statement, and that blank areas will be regarded as truly blank by planners, developers and less diligent researchers; also that monument identifications will be regarded as positive rather than theoretical or speculative. Our need to characterise and define can lead to inaccurate pigeonholing and over-confident identifications. This is no criticism of the researchers involved in this project, who are all aware of the limitations of their data and interpretations, but there is always

a danger that what archaeologists publish as hypothesis later becomes accepted as fact. To qualify the title of this section, *lux non perspicuitas non veritas est.*

The wealth of data presented in this report will demonstrate that the Midlands desert is now well irrigated and that Northamptonshire has become recognised as a fertile valley for further research and

investigation. This will be augmented by the recent completion of the prehistoric section of RAP and the vast and important data contained therein. This data, (RAP and NMP) will have a national impact and will establish Northamptonshire as having several key sites for our national understanding of the Neolithic and Bronze Age, particularly in the fields of burial and ritual.

Late Bronze Age, Iron Age and Roman settlements and landscapes

by Alison Deegan

Late Bronze Age and Early Iron Age settlement and boundaries

Although numerous, the monuments of the Middle Bronze Age and earlier, discussed in the previous chapters, represent a very small proportion of the cropmarked and soilmark features mapped by the project. The majority of cropmarks and soilmarks, and a handful of surviving earthworks, are probably the remains of settlements dating from the Late Bronze Age to the Roman period. However, as most are undated, this evidence may include a proportion of so far unrecognised earlier or later features.

After the increasingly prolific monument building of the Neolithic and Early to Middle Bronze Age, the Late Bronze Age appears to signal a return to relatively low levels of archaeological visibility, from the air as well as on the ground. Ritual or funereal landscapes, which dominate our knowledge of earlier periods, are known in the Middle and Late Bronze Age only from the chance discovery of a few cremation cemeteries (Chapman 1999, 7). As with the earlier periods, Late Bronze Age and Early Iron Age settlement evidence is sparse, relatively ephemeral and, at favoured sites, often overwhelmed by the more abundant cropmarks of later activity. Nevertheless it is possible that some elements of Late Bronze Age and Early Iron Age landscapes can be found among the wealth apparently later cropmarks recorded in the project.

Open settlement

The project has generated a significant, although undoubtedly very incomplete, record of later prehistoric open settlement in Northamptonshire. This contrasts with the experience of other Midlands NMP projects, which have reported an absence of any air photo evidence of unenclosed round houses (Winton 1998, 53; Deegan 1999, 41). During reconnaissance it can be very difficult to detect ephemeral settlement remains that

are not enclosed or associated with more substantial ditches, and so unenclosed settlement is probably under-represented in the aerial photographic record for the county.

The excavation record for Late Bronze Age and Early Iron Age open settlement in Northamptonshire is slim, but does indicate considerable diversity. The site at Great Oakley consisted of just two huts or shelters of probable Early Iron Age date, which were possibly associated with nearby iron smelting (Jackson 1982). In contrast, Early and Middle Iron Age open settlements at Crick developed into extensive and long-lived sites: Long Dole and Crick Covert were subsequently enclosed, but the settlement at the Lodge remained unenclosed into the Late Iron Age (Chapman 1995). On Rainsborough Hill, Newbottle, sparse remains of an open settlement were found on the site of a later hillfort (Avery et al 1967). None of these examples of Early Iron Age open settlement, or others excavated at Weekley Hall Wood and Wilby Way, had been recorded from the air.

Almost all of the round houses identified by the project are represented by circular or sub-circular gullies, and very few postdefined structures have been identified where gullies are not also present. Based on the excavated evidence, Jackson suggested that the gullied form, although possibly influenced by geological conditions, was 'rarely found before the Middle Iron Age' (1979b, 14). If Jackson is correct, then the Iron Age Early house is largely unrepresented in the air photographic record for the county and, while some of the many Middle to Late Iron Age open settlements had earlier origins, it is probably a very incomplete record of Late Bronze Age and Early Iron Age open settlement as a whole.

Late Bronze Age and Early Iron Age hillforts

The earliest defended sites are the small, Late Bronze Age ringwork at Thrapston, which covers less than 1ha, and the large, undated,