Excavation of Two Pits of an Alignment at Moor Lane, Long Bennington, Lincolnshire

Kate Fearn

Aerial photography has revealed the crop-marks of a series of land-divisions stretching intermittently across the East Midlands, as described by James Pickering (1978). These include alignments of parallel ditches and/or rows of pits, often in complex arrangements. One particularly interesting group, and one of the first to be discovered, lies within the parish of Long Bennington (Figs. 1 and 2; Pickering 1978, 140, 143; Wilson 1982, Fig. 60). This includes the point of junction between a triple-ditched boundary running approximately east-west and two ditches and a pit-alignment which together abut the first perpendicularly from the north (Fig. 2C). A further pit-alignment and two linear ditches can also be seen to approach and, in at least two cases, to respect the triple ditches in Fig. 2C. From their disposition alone, it seems probable that these features at Long Bennington functioned together at some stage, though they may represent several periods of construction. It is likely that the upcast from the ditches and pits created substantial banks, but no trace of them survives on the ground today in an area which has been heavily cultivated for centuries. The junction at Long Bennington lies adjacent to Moor Lane, at National Grid Reference SK 823449, and is situated in a damp hollow formed by river gravels and alluvium (Fig. 2B). Slightly higher ground to the north and south comprises Lower Lias shaley clay with thin beds of limestone. The pits excavated in 1991 were dug into gravel.

The object of the 1991 excavation at Moor Lane was to examine two of the pits, the third and fourth from the point of junction with the triple ditch (Fig. 2C). The clarity of the crop-marks in the barley in August 1991 made it possible to mark the positions of the pits to be excavated on the ground. Following harvest, it was then a simple task to set out the 7 x 4m area of the excavation, neatly encompassing the pits.

The excavation was stripped of modern ploughsoil, partly by machine, partly by hand, exposing the surface of a sandy clay/gravel subsoil over the southern half of the area, and the fill of a medieval furrow over the northern part. The furrow-fill disguised the position of the northern pit, 05, while the southern pit, 04, was visible but difficult to define at this level. Therefore the south-eastern 2m width of the trench was reduced in 0.05m-thick spits, to a depth of about 0.20m below the base of the modern ploughsoil, at which level the outline of 04 was plain to see. For this reason, the upper three contour-lines around the south-eastern side of 04 are

Fig. 1 Linear crop-marks to the west of Long Bennington, Lincolnshire, looking SSE. Excavated pits arrowed (Cambridge University Collection of Air Photographs: copyright reserved).
reconstructed as dotted lines in Fig. 3. The fill of the furrow was completely removed over the south-eastern part of the trench, following which the outline of 05 was also evident. Thereafter the south-eastern half of each pit was excavated to provide the section recorded in Fig. 3. The north-western half of 04 was excavated subsequently, but that of 05 and the fill of the furrow overlying it were left undisturbed.

The excavation demonstrated that the pits were roughly rectangular in plan, the long axis of each lying parallel to the alignment, as had been anticipated from an inspection of some of the excellent air-photographs of the site in the Cambridge University Collection, as well as those taken by Mr J. Pickering. The pits were cut approximately 0.80m (04) and 0.65m (05) deep below the surviving surface of the subsoil, with flattish bottoms and steeply-sloping sides which flared out towards the top in places. This flaring profile, which was particularly evident in pit 04, is the result of weathering upon the upper part of the pit sides, which were originally steeper. Therefore, the pits will have measured rather less when first dug than the dimensions recorded in Fig. 3. The original size of 04 was perhaps about 2.20 x 1.80m, while that of 05, though less easily gauged because of its truncation by the medieval furrow and its partial excavation, was perhaps a little smaller. The gap between the pits as excavated was 0.85m, but would have been over 1.00m originally.

Much of the fill of each pit comprised an accumulation of fine-grained silts. The pits had evidently been left open to fill naturally. Post-depositional leaching had robbed the fills of much of their original colour, making the identification of stratification difficult by anything other than slight variations in soil-texture. The one exception was a lens of stiff, blue-grey clay towards the bottom of pit 04 (shown in heavier stipple in Fig. 3). Above this, a browner grey, sandy silt with small stones made up the bulk of the fill. The top 0.20-0.30m of the fill comprised a slightly lighter brown-grey, sandy silt with fewer stones. Similar sandy fills occurred in pit 05, where the lowest part comprised brown-grey silt with stones, which appears to have been deposited from the north-eastern side.

Above this, a lighter brown-grey, sandy silt with a larger number of smaller stones was disturbed by roots (represented by streaky stipple in Fig. 3). There was no obvious evidence in either fill that upcast gravel had eroded back into the pits, which would surely have occurred if it had been dumped immediately alongside. This suggests that the upcast was either taken away or separated from the pits by a berm.

Snail-shells recovered from both pits provide further support for the view that they were left open to fill slowly. Samples were taken at 0.10m vertical intervals through each pit, and flotation was used to extract the snails from the soil. The presence of both adult and juvenile freshwater and marsh species (Lymnaea palustris, Lymnaea truncatula, Lymnaea peregra, Oxyloma pfei and Gyraulus alba) in both pits between 16.90 and 16.40m, suggests that they were water-logged for at least some time. A small number of species preferring drier, grassland habitats (Vallonia exentrica and Vallonia pulchella) were also identified in pit 04 at 16.60-16.50m. Although the sample of snail-shells recovered is too small to permit any detailed environmental study of the site, it serves to demonstrate the potential of excavation on these alkaline gravels derived from the Lias limestone to provide useful evidence for past environments. More extensive excavation of the pits and ditches which form these land-boundaries could produce plentiful environmental evidence of this kind, which might in turn help to form a picture of the landscape in which they fonctioned and to explain why they were constructed.

Neither of the pits yielded any artefacts, but 04 did contain one intriguing item, namely a fragmentary long bone of a horse, the preserved portion being a 0.20m length of the shaft from which both ends had been broken, not cut. In itself, this may seem to be of little interest, but the position in which the bone was found must lead to speculation about the purpose of the pits, for it stood upright within the fill not far from the centre of the pit, in the position shown projected onto the section in Fig. 3. The pit-fills were each excavated in horizontal spits of 0.10m thickness, the arbitrary surface revealed at the base of each spit being cleaned carefully in
search of variations in the fill which might help to betray the function of the pits. Consequently, it can be ascertained with some confidence that the bone did not stand within any intrusion cut into the pit-fill. Curious as it may seem, it is difficult to conclude other than that the bone had been pressed vertically down into the pit-fill from the level at which its top was recorded during excavation, and hard to believe that this could have served any utilitarian purpose.

It can be concluded that the pits in the alignment at Moor Lane were originally oblong in shape and were dug at regular intervals, the gaps between them being probably less than half their length. They were left open to fill progressively over what may have been a considerable period. Snail-shells preserved in these alkaline soils imply that the pits were either water-logged or very damp for at least part of their history, whilst the presence of grassland species may indicate an open environment in the vicinity of the alignment. The horse-bone pushed vertically into one pit suggests some esoteric activity. When considering the date of this alignment, and therefore of the ditches forming the other elements in this multiple boundary, all that can be said following the 1991 excavation is that the pits had become filled, and any associated bank levelled, prior to the establishment of medieval ridge-and-furrow across the site.

Dating evidence for all linear landscape features unassociated directly with settlement is liable to be sparse. In a few cases elsewhere, artifacts have been recovered from pit-alignments, whilst, in others, dating has been based upon the association of the alignment with other features. From the small body of evidence gathered so far, dates range over many archaeological periods, including Neolithic (e.g. Milfield, Northumberland - Harding 1981, 132; Mket 1981, 145), later Bronze Age (e.g. Heslerton, Yorks - Powlesland 1986, 169), Iron Age (e.g. Briar Hill and Gretton, Northants - Jackson 1974, 24, 33; Aldwincle, Northants - Jackson 1977, 46; Esbank Nurseries, Lothian - Barber 1985, 163), Romano-British (e.g. Cat Babbleton, Yorks - Cardwell 1989, 25; Heslerton - Powlesland 1986, 160-62; Langford Downs, Oxon - Williams 1946, 54-55), Saxon (e.g. Heslerton, Williams 1946, 163, 166) and medieval or even post-medieval (e.g. Four Crosses, Powys - Owen and Britnell 1989, 38).

Although aerial photography has recorded many examples of pit-alignments in areas as far afield as Wessex and Eastern Scotland, few have been sampled by excavation. Those which
have been excavated show variability in form, date and function/use. Shape ranges from circular and steep-sided (e.g. Marygoldhill Plantation, Berwickshire — Strong 1988, 121) to oval (e.g. Ewart 1, Northumberland — Miet 1981, 143; Four Crosses, Sites 9 and 10 — Owen and Britnell 1989, 32) or, more commonly, sub-rectangular/oblong (e.g. Gretton and Briar Hill — Jackson 1974, 21; Aldwincle — Jackson, 1977, 46; Heslerton — Powlesland 1986, 132). Some are thought to have held posts, for example, at Milfield (Harding 1981, 117; Miet 1981, 145). The pits excavated in the Moor Lane alignment did not contain posts, for there was no suggestion of any post-packing or post-pipe distinction within the fill of either. More often, as at Moor Lane, excavation suggests that the pits were dug and left open to fill naturally (e.g. Four Crosses — Owen and Britnell, 1989, 36). It has been suggested that some such pits were quarries for bank material (e.g. Four Crosses — *ibid*; Esbank Nurseries — Barber 1985, 163; Marygoldhill Plantation — Strong 1988, 126). At Marygoldhill, a pit-assembly with an adjacent upstanding bank has been recorded (*ibid*, 113) and several 'upstanding' pit-alignments are also known in Yorkshire (Mortimer 1895; Spratt 1989, 36-39). However, the majority of pit-alignments survive only as crop-marks, with all traces of any earthwork obliterated by the plough, as is the case at Long Bennington. In some instances, pit-alignments were re-cut as ditches (e.g. Cat Babbleton-Caldwell 1989, 22), or as a possible palisade-slot (Heslerton, Pered 5-Powlesland 1986, 132). In both cases, land-divisions or boundaries created at first as pit-alignments are believed to have maintained their importance over several centuries, as is again suggested by the complexity of the linear features recorded near Long Bennington.

**REFERENCES**


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**ACKNOWLEDGEMENTS**

The Society is grateful to the Council for British Archaeology for providing a grant towards the cost of publication.