

PENTRICH: MEDIEVAL/POST-MEDIEVAL BELL-PIT FEATURES AND PONDS

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During the summer of 1996 a survey of linear field banks, bell-pits, ponds and ridge and furrow was carried out by myself and a small team of assistants. This short article will describe and comment upon features in two fields; referred to here as Fields 1 and 2. Field 1 is immediately west of St Mathew's church on the western side of the village. Field 2 is adjacent to Field 1 and to its south.

The morphology of the bell-pit features differs markedly in both fields (compare Figs. 1 and 2). In Field 2 (Fig. 2) they are clustered into two distinct groups. One of the linear field boundaries in Field 2 has been truncated by bell-pit workings and the dotted line shows the area which contains ridge and furrow underlying these features. The ridge and furrow runs east-west, parallel to the field boundaries, and the ridges are *c.* 1m wide, as are the furrows.

In Field 1 (Fig. 1), the features are mainly in the top north-western corner of the field and consist of three or four bell-pits (Fig 1: B) and a pond (Fig. 1: A). Although it is likely that the pond feature is man-made its purpose, other than for drainage, is not yet known. This field also contains a linear field bank seen only faintly from the east and immediately adjacent to and overlain in places by the footpath. There may also be a channel feature in the corner of the field (Fig. 1: C). However, the features in this field are much less clear than those in Field 2 because of their more disturbed nature. This disturbance has been caused by soil and garden overburden from the church graveyard and re-location of the boundary wall. The churchyard used to extend to the row of trees to the east but the wall was relocated to its present location sometime during the last 150 years, perhaps due to the underlying unevenness of the ground which may have resulted from earlier bell-pit working. The land between the wall and the row of trees is glebe land.

Concentrating on Field 2, where the features are clear and largely undisturbed, we can get an idea of the chronology of the use and exploitation of local resources. The linear boundaries (Fig. 2: D), which are clearly seen on the ground, terminate at two oak trees just above the stream channel along the eastern edge of the two fields (Fig. 2: G). The earliest map evidence for the existence of these boundaries dates to the 1580s (Devonshire Collections). The tithe map of 1846 also shows these boundaries in existence, however, by the 1921 Ordnance Survey map they have gone. It is difficult to ascertain from the map evidence the precise date for the truncation of these boundaries. It is clear, however, from the pattern of clustering in Field 2, that the bell-pits were mined in two separate fields and their locations were decided by the existence of the boundaries. The ridge and furrow is a fairly common type and though straight and quite narrow (for dimensions see above, under Field 1), unlike *classic* Medieval ridge and furrow, nonetheless it indicates that Post-Medieval ploughing followed earlier traditions after the enclosure of

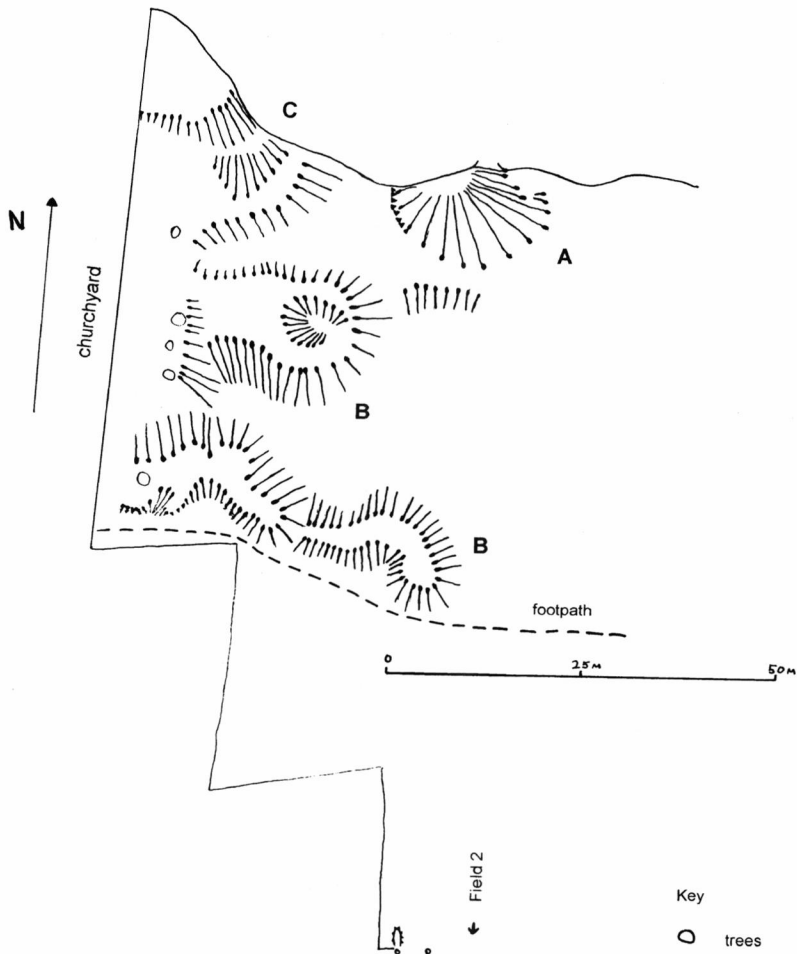


Fig. 1: Pentrich: Surveyed features in Field 1. A. Pond feature; B. Bell-pit features; C. Channel features.

strips in the sixteenth century. William Senior's survey, dated to around 1600 to 1628, describes most strip fields around Pentrich as 'crofts' (i.e. private fields) (Fowkes and Potter 1989, pp). It is clear that by the late 1500s these strips had been enclosed. Field evidence, using Hooper's Rule (Rackham 1986, 194-99) to date the hedgerows, comes up with a conservative estimate of four centuries. The tithe index of 1849 shows the fields as pasture.

Enclosure may well have ended the ploughing of these strips and the bell-pit mining is likely to have followed in the century or so after. It is almost certain that mining took place at a time before the Pentrich Revolution of 1817, where the extraction of local coal may well have averted this local economic catastrophe.

Field 2 also contains an enigmatic pond feature with associated channels and a raised platform (Fig. 2: A, B, I). This pond feature and platform are clearly man-made and appear to have been lined around the inside edge with large stones. There is also a small

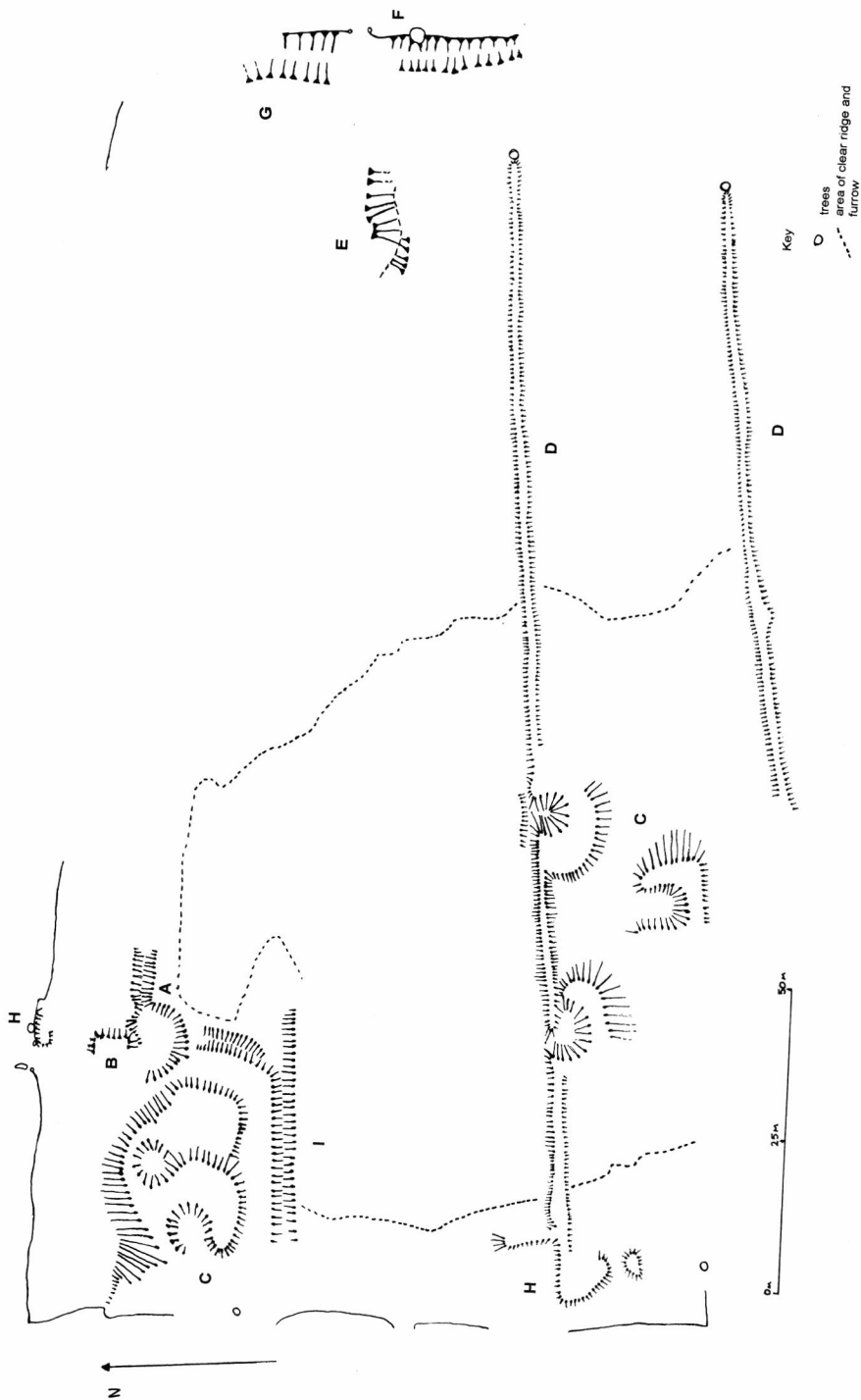


Fig. 2: Pentrich: Surveyed features in Field 2. A. Pond and drainage channel features; B. Platform feature; C. Bell-pit clusters; D. Linear field banks; E. Drainage channel feature; F. Willow pollard; G. Stream channel feature; H. Wall features; I. Drainage channel feature.

wall feature under a hawthorne bush on the platform (Fig. 2: B), orientated north-north-east by south-south-west. It is possible that this feature continues north-east but a recent deposit of rubble over much of the area, to facilitate tractor access into the field, now obscures the evidence. If there is any continuation of the wall feature below the rubble then this may well have been a method of channelling water from a well, located in what is now the vicarage, to the pond. The final features associated with the pond are a channel which seems designed to drain water away from the pond (Fig. 2: A, E) and another which seems to carry water to the pond from the west and down the field from the top cluster of bell-pits (Fig. 2: I). The purpose of the pond is unclear, however, the best hypothesis put forward seems to be that once coal was extracted it was then washed and that the pond was similar in use to those used by Derbyshire's lead miners to wash their ores (D. Barrett *pers. comm.*) (Lane 1986, pp). The pond could also have acted as a drainage reservoir for draining the bell-pits as well as for coal washing.

The final feature in Field 2 (Fig. 2: H (bottom left)) is likely to be part of an eighteenth century crofter's house.

The archaeology of this area represents a valuable cultural resource in what is essentially a heavily industrialised region that has lost much of its earlier archaeological heritage due to opencast mining in recent years. Pentrich and its immediate surrounding countryside has been fortunate in escaping largely intact the larger scale mining operations that followed the Industrial Revolution. By studying this survival we can get a picture of the small scale exploitation that just preceded the Industrial Revolution and this gives us an idea of a small village's social organization, relationship with resources and response to the newly emerging industrialization of the region.

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