SECTION TEN

Excavations at Southwick Hill

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Introduction

Southwick Hill lies to the south-east of Thundersbarrow Hill and to the south-west of Mile Oak (Fig. 1.1). Thundersbarrow Hill was a nucleus of settlement occupied from the Bronze Age to c. AD 400, and aerial photographic surveys have revealed the remains of an extensive area of lynchets and rectangular fields associated with the Iron Age hillfort and the later Romano-British farmstead (Curwen 1933: 109–33; Rudling, forthcoming). Some of these fields, towards the southern part of the early farmland, extended eastwards onto the area (the field numbered 7906 on the Ordnance Survey map) of the western entrance to the Bypass tunnel below Southwick Hill. At this location a noise bund and landscaping were designed to run along the south-eastern side of the Bypass. In advance of such works, in March 1993 archaeological trial excavations were arranged by John Mills, Deputy County Archaeologist for West Sussex, to identify the quality and extent of the archaeological features marked so clearly on the aerial photographs in the County Sites and Monuments Record (i.e. Site Number 4366).

The field system associated with Thundersbarrow Hill hillfort and Romano-British farmstead covered a large area extending outwards to over 2km from the nucleus of the settlement. The fields have been a subject for research since the 1930s when E. Cecil Curwen with the Brighton and Hove Archaeological Society (BHAS) examined the earthworks on Thundersbarrow Hill (Curwen 1933). Further work, a plough-damage assessment, was undertaken upon the hill in 1985 (Rudling, forthcoming). The remains comprise a complex of rectangular fields and lynchets. The fields, which are laid out upon a north-south/east-west alignment, are still visible as crop-marks recorded in the aerial photographs. Some lynchets still stand as clearly defined, substantial earthworks, up to 4m in height, while others have been destroyed by either military activity or constant ploughing in modern times. Where the lynchets have been ploughed away, as on Southwick Hill, their positions are defined by the erosion of the chalk where the ancient plough cut into the side of the hill (i.e. a negative lynchet) and by the build-up of ancient ploughsoil upon the opposing side (i.e. a positive lynchet). A few lynchets on Thundersbarrow Hill have been sectioned and dated to a period extending between the first and fourth century AD.

Field number 7906, the subject of the trial trenching in advance of works allocated with the Bypass, has been under continuous cultivation since the early 1930s, but elderly residents of the area (pers. comm.) remember the fields when they were exploited for rough open grazing. However, since the harvest of 1991 the land has been ‘set aside’ from arable cultivation. The low ridges, said to have been seen when the field was last cultivated, were therefore not visible, and unfortunately, the new foliage also precluded the possibility of either ‘fieldwalking’ the site or making a detailed contour survey. Four trial trenches were cut across the field to examine the site of the crop-marks and to seek evidence of any further archaeological remains (Fig. 10.1).

The trenches, varying in length between 72m and 54m, were cut across the field with a 360-degree tracked mechanical excavator fitted with a toothless bucket some 6ft in width. The ploughsoil was carefully removed down to the level of the coombe deposits, leaving a clean surface of chalk unencumbered by loose crumbs of earth. The bottoms of the trenches were allowed to dry before they were brushed to expose any archaeological features dug into the bedrock of the hill, and at the same time permitting a

Fig. 10.1 Southwick Hill: Trench layout in relation to the Bypass and anomalies visible on aerial photographs.
detailed survey of the levels of the three major trenches designated 1, 2 and 3 running up the hillside. The archaeological features exposed were excavated by hand to record their fill in both section and plan (Fig. 10.2).

The results of the excavations were somewhat surprising in that two of the principal crop-marks designated A and B in Figure 10.1 were not deep ditches as might have been expected from the study of the air photographs, but accumulations of modern ploughsoil over a negative lynchet, and the build-up of ancient ploughsoil of a positive lynchet (see Fig. 10.2: main sections 1, 2 and 3). On a similar alignment as the lynchets, a crop-mark runs on a northerly course across the site of the new Bypass onto the hill beyond. Its excavation in Trench 1 revealed a deep ditch cut into the chalk some 1.20m wide and 700mm deep (Fig. 10.2: Section 1). Although its function cannot now be interpreted, it would seem to be associated with the enclosed fields of the earlier period, so clearly defined from the air towards the west.

The excavation of the four trenches

Trench 1

Trench 1 rises from 65.5m above sea level at its western end to some 76m at the other end. The depth of ploughsoil varies from an average of some 300mm to over 800mm where the

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Fig.10.2 Southwick Hill: Plans and sections.
soil had accumulated between the lynchets.

The boundary between two lynchets is clearly defined in this trench some 18m from its western end. The outer edge of the higher lynchet has been almost completely ploughed away. Here the soil has been dragged over the edge leaving an accumulation of topsoil approximately 800mm in depth (Fig. 10.2), forming the crop-mark seen in the air photographs.

The deep boundary ditch (ditch 1) was cut into the chalk. It was about 700mm deep and 1.2m wide at the top. The bottom of the ditch contains some 60mm of silt and a fill of small stones and ploughsoil. It was capped by flints probably dragged into its soft fill by the action of later ploughing (Fig. 10.2: Section D).

Trench 2

The western end of Trench 2 is some 61m above sea level and rises to 72m. The depth of ploughsoil varies from an average of 250mm in depth to over 800mm at the edge of the lynchets.

Similar to Trench 1, the boundary between the two lynchets is clearly defined as a negative lynchet some 18m from the western end (Fig. 10.2). However, the boundary between those at the top of the hill is marked by a deep build-up of ancient ploughsoil some 750mm in thickness and visible as an impressive crop-mark.

The mechanically-excavated trench crosses ditch 3 at right-angles some 32m from the western end. The ditch, which was cut into the chalk, was about 500mm wide and 200mm deep and filled with about 50mm of silt and a mix of ploughsoil and small fragments of chalk (Fig. 10.2: Section E). It was probably the continuation of ditch 1, the early field boundary exposed in Trench 1.

The mechanically-excavated trench crosses ditch 4 at an angle of 45 degrees. This feature, which is cut into the chalk and measured 800mm deep and 1m wide, had almost vertical sides (Fig. 10.2: Section F). The ditch is loosely filled with clean chalk, suggesting that it was backfilled soon after it was dug. The looseness of the fill would suggest that it is not of any antiquity, and it could be interpreted as a military trench like those cut through the lynchets west of Thundersbarrow Hill (Curwen 1933: 110).

Trench 3

Trench 3 lies between 55m and 62m above sea level. The depth of the ploughsoil varies from an average 250mm in depth to some 750mm at the boundary between the lynchets. The boundary between the lynchets is again clearly marked, as in trenches 1 and 2.

Ditch 5 runs along the boundary between the two lynchets in the mechanically-excavated Trench 3. The ditch is 800mm wide and 400mm deep, and filled with ploughsoil and small fragments of chalk. The alignment suggests that it is a continuation of the boundary seen in Trenches 1 and 2. The section clearly indicates that the ditch was earlier than the lynchet (Fig. 10.2: Section G).

Trench 4

Trench 4 runs on an approximate north–south alignment, the centre of which is some 60m above sea level. It was excavated to examine a linear feature seen on the air photographs running on an east–west alignment. This feature (ditch 2), cut into the chalk, is some 250mm deep and 450mm wide and filled with a little earth and fragments of chalk (Fig. 10.2: Section H). It probably formed a boundary for one of the early fields.

Conclusion

The excavations in field 7906 elucidated the crop-marks shown on various aerial photographs and revealed the remains of a part of the recorded ancient field system extending outwards from Thundersbarrow Hill, a nucleus of settlement dating from the Bronze Age until the fourth century AD. The fields are of two periods: the earliest comprised rectangular enclosures set out upon a north-south/east-west alignment; then the second period saw the superimposition of some lynchets along the sides of the hills. Those on Southwick Hill have been almost completely levelled by the plough, possibly in recent times, but their alignments are still marked in the foliage of growing crops as substantial crop-marks, formed by the considerable depth of soil accumulated on the boundary between each lynchet. Some other long linear crop-marks elsewhere in the district might be similarly interpreted. Although the excavation of these boundaries have revealed more information on the field system associated with the occupation of Thundersbarrow Hill, their remains have been so severely damaged by modern ploughing that little detail survives to record. The excavation of the four trenches revealed nothing to suggest that the field had been exploited for any purpose other than for agriculture.

The spoil lifted by the mechanical excavator was searched for finds as far as it was possible, but none were found. Only one very abraded sherd of Late Iron Age coarse ware was revealed during the course of the hand excavations, occurring in the loose fill of ditch 4. The absence of other finds in the area indicates that there was no nearby domestic occupation secondary to that on Thundersbarrow Hill.