

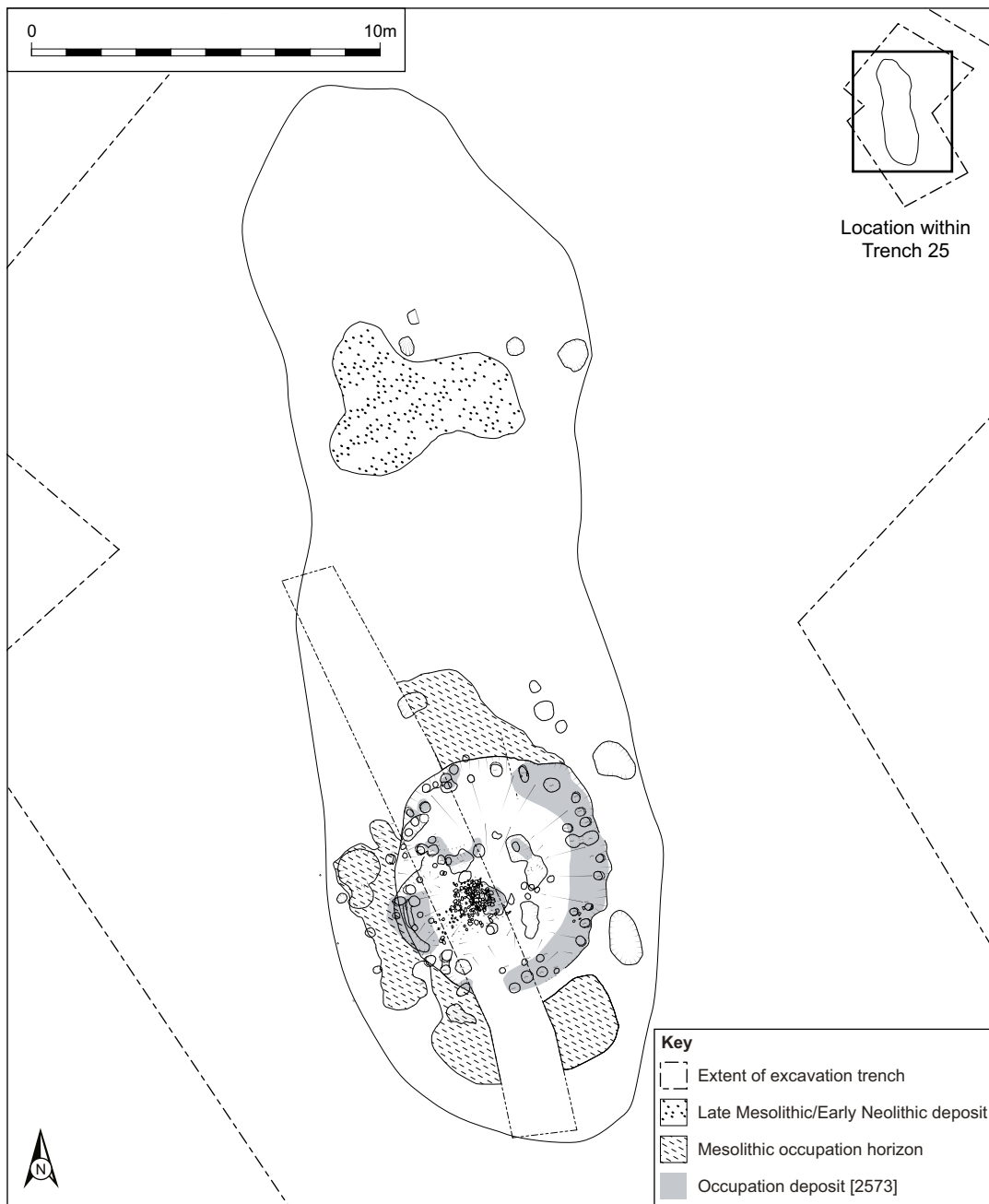
### 3. THE EXCAVATION EVIDENCE: FEATURES AND DEPOSITS

#### 3.1 Methodology

An area 1150m<sup>2</sup>, centred on the hollow, was mechanically stripped of topsoil to the C-horizon or the first archaeological deposit encountered. All lower colluvial horizons and underlying anthropic deposits were subsequently excavated on a formal grid system (Illus 2). Individual grid squares (0.5m × 0.5m) were removed by spit or stratigraphic unit, thereby

maximising data collection for artefacts and ecofacts.

A comprehensive sampling regime was employed during the excavation. Palaeoenvironmental and soil chemistry samples were retrieved from the full range of features and deposits associated with the house including occupation horizons, refuse deposits, the fills of features and lower colluvial horizons. The frequency and quantity of sample collection was determined by the significance of the context. In the case of features and horizons associated with the construction and occupation of the house, 50% of



Illus 4 The extent of the hollow

the deposit was retained. Elsewhere, the sampling of the infilling colluvial deposits was restricted to that of one grid square in eight. All spoil, other than that retained as samples, was processed on site with the use of a stationary 3mm wet-sieve in order to maximise artefact recovery.

### 3.2 The hollow

The removal of the topsoil by machine revealed the full extent of the hollow in which the robust house had been built (Illus 4). This natural ovoid-shaped feature lay within free-draining fluvio-glacial sands and gravels, and had been initially infilled with shallow colluvial deposits (Context 2544) representing an Early Holocene silting event (Ellis, Section 7 below). The hollow extended for a maximum of 31m north to south and by 9m east to west and was up to 0.5m deep.

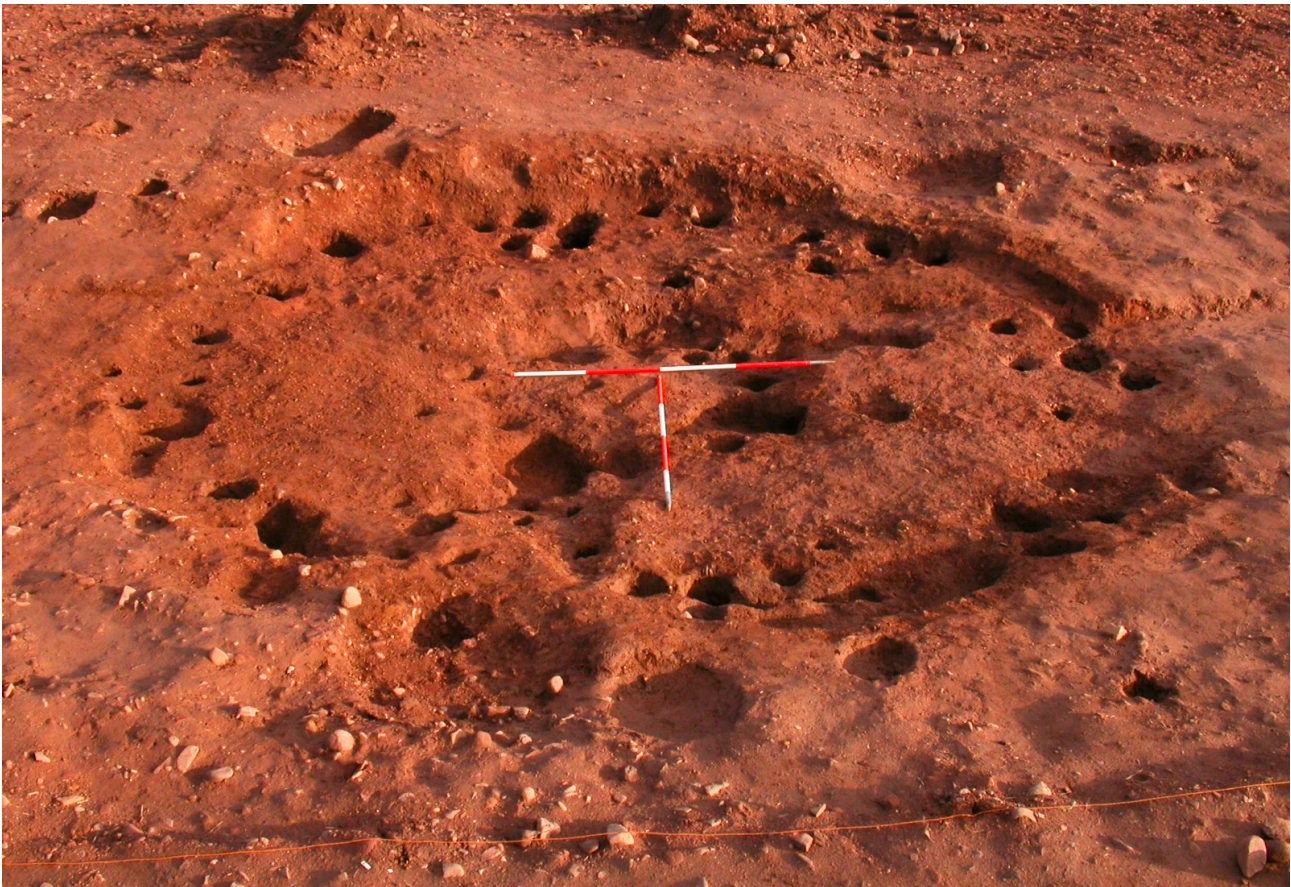
The removal of the colluvial deposit (C2503) revealed two broad phases of underlying

archaeological activity. In the north of the hollow lay a small group of Late Mesolithic and post-Mesolithic features including pits and a shallow occupation horizon (Illus 4). The Mesolithic occupation was concentrated within the southern portion of the hollow and consisted of the sub-circular house pit. Several contemporary occupation horizons and 13 pit and post hole features were also recorded around the immediate periphery of the house pit.

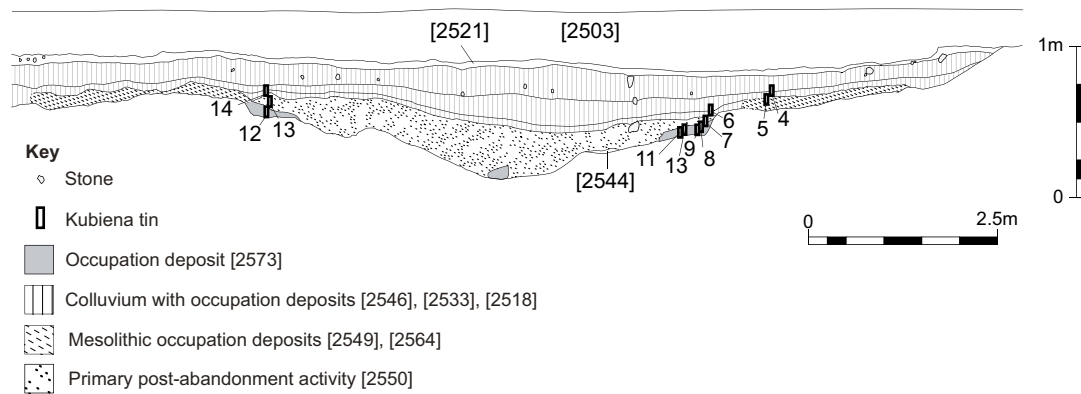
### 3.3 The robust house (Illus 5, 6 and 7)

#### 3.3.1 The house pit

A large sub-circular pit which measured 6.8m north to south × 6.2m east to west, had been excavated into the sands and gravels, leaving a sharply defined and steeply sloping edge (Illus 5). This was especially visible along the northern and eastern perimeter, where it reached a maximum depth of 0.35m (Illus 6). The floor edge was less defined along the western



**Illus 5** The Mesolithic house after excavation, looking E. The sharply defined E edge of the house pit is visible and in the foreground the cluster of postholes just outside an apparent hiatus in the post ring suggests the likely position of the entrance



**Illus 6** W-facing section through the Mesolithic house (the vertical scale has been expanded to make the stratigraphy clearer)

perimeter, with the central portion in particular showing an apparent hiatus. Here the floor cut had been replaced with a worn, gentle gradient (Illus 7). A distinct realignment of the cut towards the interior of the hut was also visible along this section of the perimeter. This apparent hiatus, together with the attendant post hole/slot distribution, makes this the most likely position for a formally defined entrance (see below). At the southern end of the house pit a small segment of the perimeter had been truncated by the evaluation trench.

### 3.3.2 Post rings, entrances and post slots

The excavation of the sunken floor revealed approximately 50 structural post holes. These features were arranged around the internal perimeter of the house pit forming two roughly concentric post rings (Illus 5). The outer post ring consisted of a near continuous line of post holes, while those along the inner post ring were more intermittently placed. The post holes varied widely in size, ranging from between 0.25m and 0.55m in diameter and up to 0.60m in depth. Upon excavation it became clear that the majority of the post holes associated with the post rings were angled inwards at approximately 6° towards the centre of the house (Illus 8). This would have created a steeply pitched roof. The area enclosed by the outer post ring would have provided a roughly circular living space some 28m<sup>2</sup> in area.

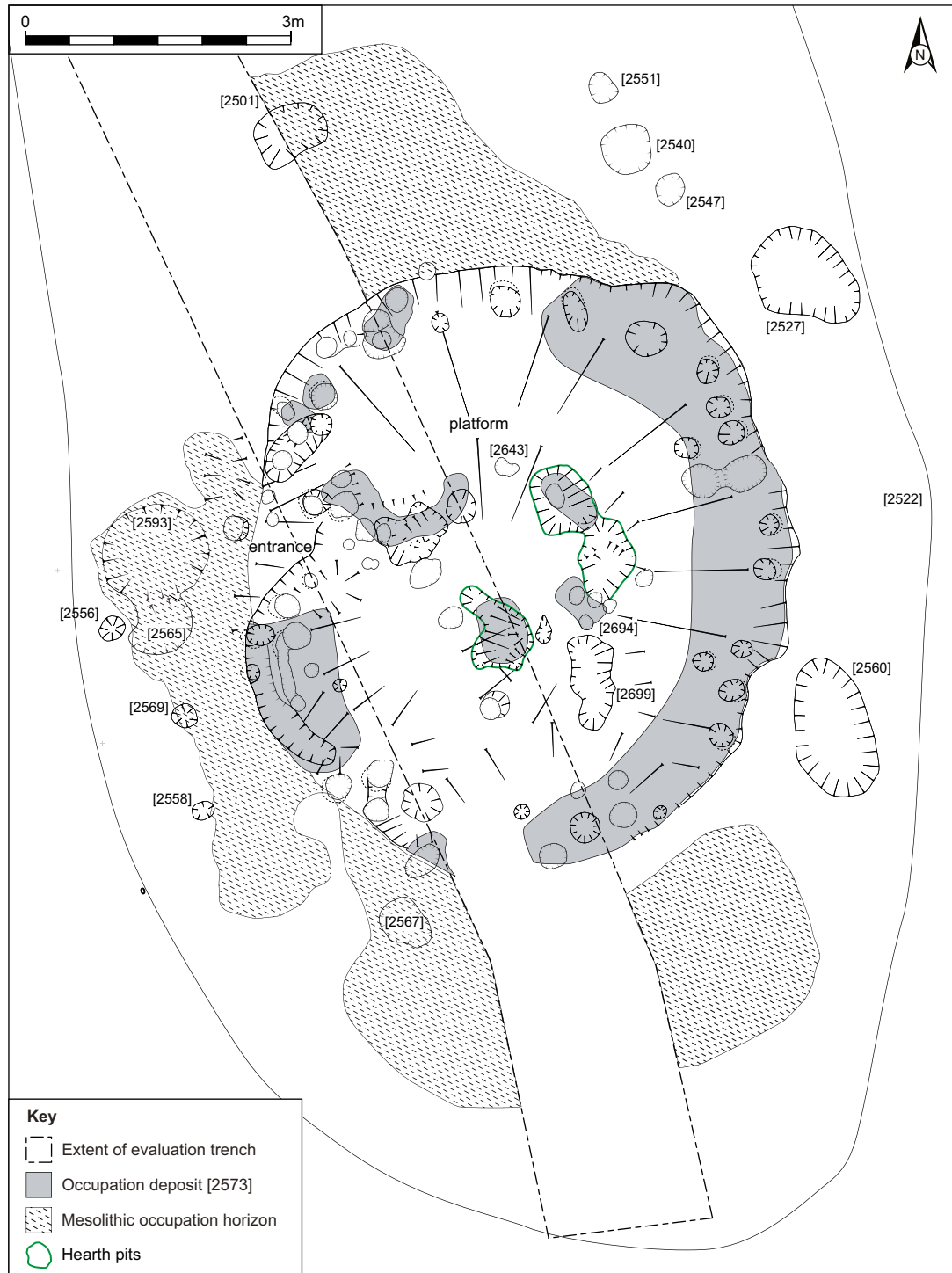
The post holes were filled with deposits of organic sandy silt containing charcoal, charred hazelnut shell and lithic material. The wood species represented in the charcoal suggests that hazel and oak posts were

used; these had been occasionally packed in place by beach cobbles.

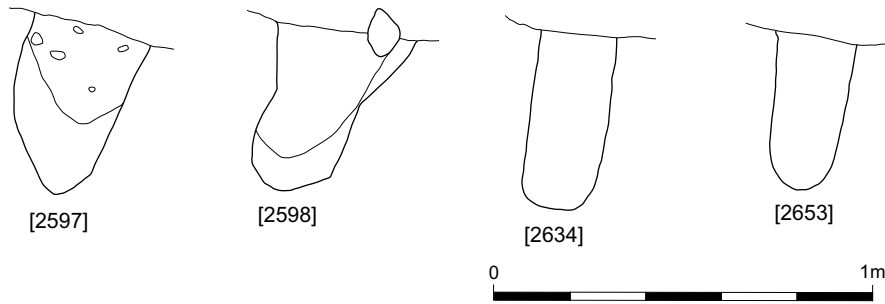
The majority of the larger post holes lay along the outer post ring. Given the generally smaller size and intermittent distribution of the post holes situated within the inner post ring, it is likely that these represent repairs or roof supports rather than representing a substantial rebuild of the structure. This is supported by their paired distribution and by the fact that several examples were intercut with those on the outer post ring (Illus 7). Two curvilinear post-slots were located on the south-western edge of the structure. The largest of these features (2659), appears to be a bedding trench and continues the line of the outer post ring along this side of the house.

The post rings were not continuous, and several hiatuses are apparent along the southern perimeter, one occurring within the area truncated during the evaluation. These gaps were initially identified as the possible entrance (Gooder 2007); however, there are two mitigating factors against this hypothesis. Firstly, both gaps were found to be sealed under the refuse deposit (2573) which appears to have built up during the occupation of the house (see below). It is likely that this deposit would have been eroded away during any use of the area as an entrance. Secondly, the gaps are associated with the vertically sloping cut of the house pit. Again, this shows little of the erosion likely to have been caused by repeated footfall.

A third hiatus within the post rings was observed along the western perimeter of the house. This



Illus 7 Plan of the Mesolithic house



**Illus 8** Sections through selected postholes

gap was 1.5m across and coincided with both the terminated and realigned cut of the house pit, and with the gradual sloping of the ground surface into the interior of the house. This is consistent with the probable effects of erosion through footfall. The gap was flanked by a cluster of post holes including the 'door posts' (2592–2715), suggesting a formal entrance-way (Illus 5 and 7). The complex clustering of post holes associated with the entrance illustrates a degree of replacement and refurbishment. This is to be expected in an area of the house that would have been subject to the constant movement and interaction of its inhabitants over time.

### 3.3.3 The platform

A raised crescent-shaped platform lay within the northern and eastern perimeter of the house (Illus 7). The platform was most exaggerated to the north, where it lay approximately 0.30m above the ground surface occupied by the hearth pits clustered within the centre of the structure. It is likely that the platform was formed through the erosion of the ground surface surrounding the hearth pits by the constant movement of the inhabitants within this area.

### 3.3.4 The hearth pits and other internal furniture

Three large sub-triangular pits (2677, 2670 and 2680) were revealed clustered around the centre of the house. Chemical analysis (Inglis 2002: 8) revealed that all three pits provided a similar signature of high phosphate levels, and inclusions of charcoal and burnt bone; Pit (2677) also contained substantial lithic material. It is suggested here that these pits represent different phases of hearth use. Complex hearth arrangements appear to be a

common structural component of such dwellings, occurring at both Echline Fields (Robertson et al 2013) and Howick (Waddington 2007: 43).

Unfortunately, the bone within the hearth pits was too fragmentary and poorly preserved to be identified to species. Phytolith analysis of the deposit in Pit 2677 suggested that the fuel used in the hearth consisted of hazel and oak, with smaller quantities of grass. The absence of cells associated with flowers or seeds suggests the fire was set in either early spring or late autumn (Madella 2002: 23). As with many of the internal features of the house, the hearth pits were partially covered by the refuse deposit (C2573). This is likely to have built up over the pits as they fell out of use and were replaced.

All three of the hearth pits appeared to be surrounded by a tripartite arrangement of post holes (Illus 7). These were slightly inclined towards the centre of the pits and it is conjectured that these features are the structural remains of a tripod set over the fire pit.

With the exception of probable Refuse Pit 2699 and Post Holes 2694 and 2643, no other interior furniture was observed (Illus 7).

The distribution of hearth pits and post holes also corresponds to the internal spread of the occupation deposit (C2573), and in effect defines a halo around the interior perimeter of the house, free of any occupation debris and internal furniture.

### 3.3.5 Occupation and post-occupation deposits

The occupation deposit (C2573) overlies many of the internal features of the house (Illus 6). This dark, organic material was especially concentrated along the eastern and south-western perimeters, where it reached a maximum depth of 0.13m (Illus

9). A more intermittent spread lay over the hearth pits and post holes described above. The deposit consisted of a mixture of sand and decomposed organic matter, including wood charcoal, charred hazelnut shell and ash. A large amount of lithic material was also present. The deposit was initially thought to be the remains of a turf wall (Goeder 2007), but this has subsequently been disproved by micromorphological analysis (Ellis, Section 7 below). The most likely explanation for its presence is that it represents an aggregation of domestic refuse that built up around the edges of the structure and over the interior furniture. It is conjectured that the deposit does not represent the actual living floor of the house; this would most likely have been a mixture of branch, bark or softer plant material (Grøn 2003: 695 – and see below). Rather, it is the probable remains of domestic refuse which has fallen through this flooring and been allowed to accumulate out of sight. The distribution of the deposit is telling, occurring as it does under the

largely inaccessible eaves of the building and over internal pits and posts. Very little of the deposit was identified within the habitable areas of the structure. Instead, the material illustrates the presence of delineated activity areas that existed within the house (see Engl, Section 6 below). A similar deposit was recorded at the Echline Fields house site around the southern and northern edges of the structure. This was again thought to be the remains of turf walling (Robertson et al 2013: 81).

The absence of ‘occupation floor’ deposits such as those produced at both Echline Fields (Robertson et al 2013: 81) and Howick (Waddington 2007: 37) can possibly be explained by the shorter period of occupation represented at East Barns. The houses at both Howick and Echline Fields were occupied over a much longer timescale, and there is evidence of periodic reoccupation at both sites seen in the construction of new floor surfaces, most probably to repair the effects of erosion produced during former periods of occupation.



**Illus 9** The house and hollow under excavation, looking N. The occupation deposit (2573) has been partially removed but its depth across the house is still visible

The occupation deposit was sealed in turn by a colluvial deposit of sandy silt (C2550). This completely infilled the house pit to a maximum depth of 0.30m (Illus 6). The silt was heavily bioturbated and contained a significant amount of charcoal and charred hazelnut shell. Narrow-blade lithic material was also present in substantial quantities. It is probable that this deposit represents material initially washed into the house area from surrounding occupation horizons now lost to the plough.

Overlying Deposit 2550 was a succession of mixed, bioturbated colluvial deposits (Contexts 2546, 2533, 2518) containing inclusions of worked lithics, rock fragments, burnt hazelnut shell fragments and charcoal. As with the underlying silt (C2550), it is probable that this anthropic material was incorporated into the colluvium through natural agency. The material may have been washed into the area of the house from remnant midden deposits surrounding the natural hollow. However, all three colluvial deposits are stratigraphically later than the occupation horizons surrounding the house. This makes it more likely that the anthropic material reflects continuing activity around the hollow, the debris of which gradually washed into the hollow throughout the Mesolithic.

### 3.3.6 Peripheral occupation horizons and cut features

Immediately surrounding the house to the north, south and west was a spread of occupation debris

(Contexts 2561, 2564, 2549) (Illus 6 and 7) which consisted of compact sand, lithic material and charcoal flecks some 0.10m in depth. The lack of such an occupation deposit to the east of the house is explained by the limited extent of the hollow in this direction. It is likely that modern ploughing would therefore have removed any such in situ deposits, although several cut features containing Mesolithic material did survive on this side of the house (Illus 7).

These features consisted of a probable fire/cooking pit (2527), and two refuse pits (2560 and 2540), all of which produced a substantial amount of lithic material, charred hazelnut shell and fragments of burnt bone. Two post holes (2551 and 2547) were also recorded situated on either side of Pit 2540. To the north and east of the house, the occupation horizon sealed Refuse Pits 2501, 2593 and 2565 together with several smaller probable post hole features. All of the pit features produced a recurring assemblage of lithic material, charred hazelnut shell and fragments of burnt bone.

The masking of these features by the occupation horizon associated with the house reveals an initial phase of Mesolithic activity within the hollow. This activity may be associated with the very early life of the house which occurred before continued occupation could create more substantial horizons of cultural material.