

Settlement Sites with Middle Neolithic Houses at Grødby, Bornholm

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Since 1979 large scale excavations have taken place on a settlement area at Grødby, Aaker parish, Bornholm (1). Until now the investigations have largely been concerned with extensive settlements and associated grave fields from the Iron and Viking Ages (Watt 1980a,b; Watt 1983).

As a by-product of these excavations traces of a considerable number of Neolithic settlements have turned up including several more or less well preserved house sites, numerous pits and odd graves, some of which have been investigated. Together they appear to span all main chronological phases from Early Neolithic B/C (EN B/C) until the late Neolithic (LN).

The settlement area at Grødby is situated on a low sandy ridge, 30–40 m above sea level and about 2 km from the present coast line, which in this region appears not to differ noticeably from that of the later part of the Stone Age. Towards the north the settlement area is bounded by the stream of Grødby Å. Judging from numerous stray finds, land form, and soil type the total settlement area is believed to cover no less than 100,000 m².

The following is a preliminary account of the extent and character of the Stone Age settlement with a description of the house sites registered so far and a presentation of some of the more important finds which form the foundation for their dating.

Fig. 1 shows the situation and the approximate extent of the Neolithic settlement complex at Grødby. So far 25,000–30,000 m² have been investigated. The extent and intensity of the original settlement is indicated by the occurrence of much Neolithic material in the fill of the post holes and other structures of later date, even in areas where primary Neolithic layers have long since been removed by soil erosion and intense agricultural activity.

For practical reasons a considerable portion of the settlement area has been only partly excavated (Watt

1983, 138–140). It should also be stressed that the following discussion is based on a cursory examination of the vast material from Runegård and Grødbygård.

Much of the find material from the different Neolithic settlement sites is derived from naturally protected depressions in the originally undulating terrain. Much material has been redeposited in connection with agricultural and building activity in the Iron and Viking Ages. In some areas, however, pits, house remains and largely undisturbed Neolithic settlement floors have been preserved.

THE GRØDBYGÅRD SETTLEMENT

In connection with the investigation of an extensive grave field dating largely from the Roman Iron Age an area of approx. 1200 m² was stripped of its top soil. The majority of the exposure was taken up by 150 graves and various other structures of a later date (fig. 2). However, in the southwest corner the unmistakable outline of two houses (A and B) appeared, both of which can be dated to the Middle Neolithic period.

House A, orientated NNE-SSW, measured 7.0 m in width and had a length of at least 12.75–13.00 m. Along the axis of the house the holes for 3 large roof supports were placed at intervals of 4.50 and 4.75 m. A possible continuation of the line of roof supports to the SSW is obscured by the presence of a large inhumation grave of Early Germanic Iron Age placed in the line of roof supports. The imprints of the large posts themselves show a diameter of 40–45 cm and that they were sunk at least 1 m below the surface. The rectangular outline of the house itself was shown by a partially preserved, shallow wall trench with a width of up to 20 cm and a preserved depth of less than 10 cm fading in places to a slight discolouration of the subsoil. Occasional imprints of slender posts with a diameter of 8–10 cm were pre-

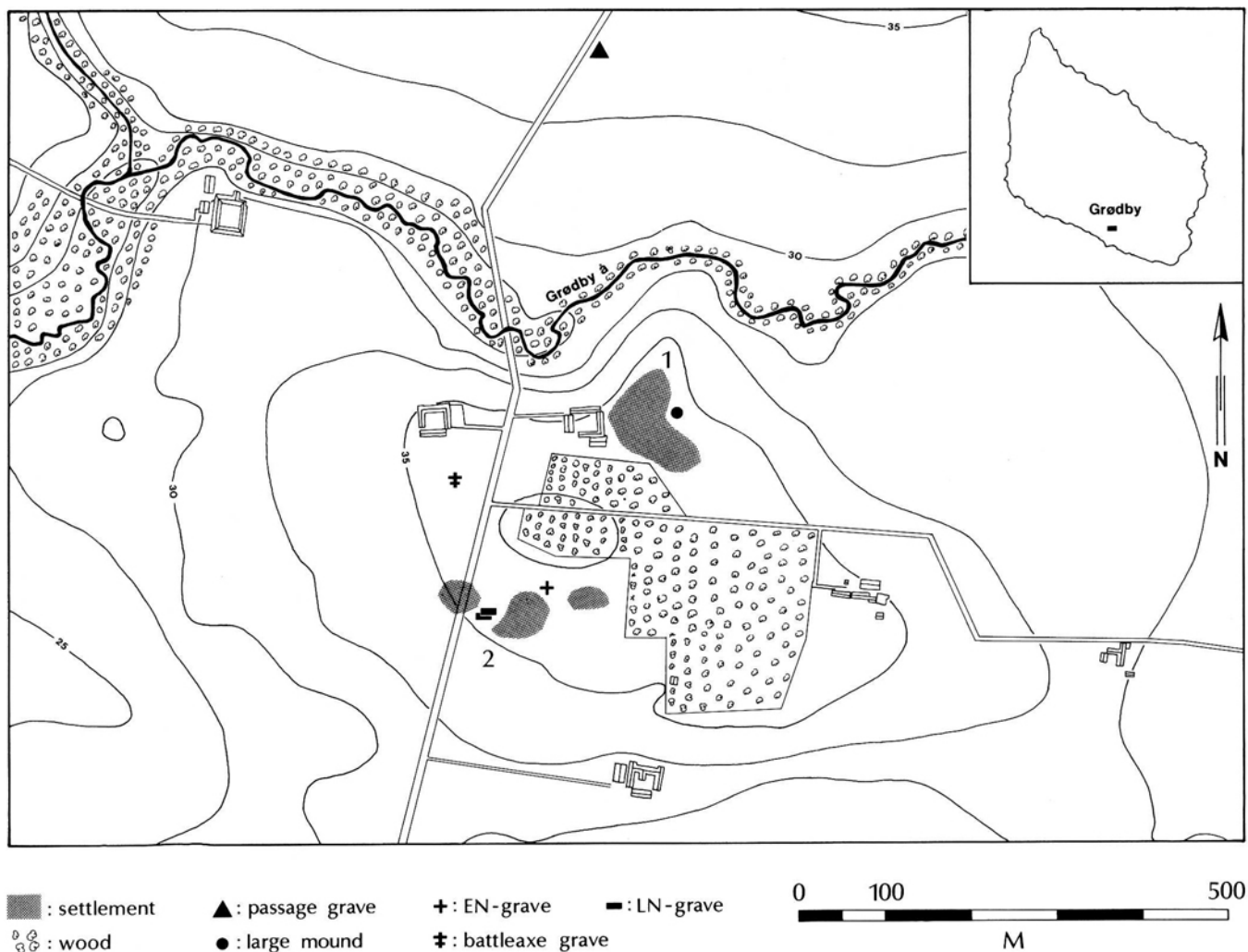


Fig. 1. The Grødby area showing the Neolithic settlement complex. 1-Grødbygård, 2-Runegård (East).

served in the bottom of the trenches. The posts appear to have been closely spaced. The absence of substantial posts in the line of the walls indicate that the capacity of the walls for supporting a roof must have been very limited. Hence it is not surprising to find a subsidiary line of supports placed 1.0 – 1.2 m inside the wall trench. These posts which may be described as of intermediate size with a depth of 15 – 25 cm were spaced at 2.50 – 2.75 m. Individual posts were not matched by one immediately opposite, but were placed obliquely in a zig-zag pattern. The internal posts are interpreted as supports for a “side-beam” construction taking the weight off the weaker walls (figs. 3-4).

House B was less well preserved and lacked any trace of a wall trench. As in house A the roof had been supported by 3 large posts orientating the building NNW-SSE. The posts were spaced at 3.50 and 3.75 m, i.e. slightly closer than those of house A. A number of subsidiary posts were placed in similar positions to those in house A. The absence of a wall trench in house B is easily explained as this house had suffered more damage by later ploughing. House B never had more than the three main roof supports and hence cannot have been more than 10–11 m long. The width of the house is estimated at 6.5 m, which makes it fractionally smaller than house A.

The dating of the Grødbygård houses A and B

Abundant ceramic material was found associated with the two Grødby houses. In the fill of the imprints of the major roof supports of house B were found a nearly complete “tulip-shaped” funnel beaker decorated below the rim with a faintly incised V-ornament (fig. 6a), fragments of a conical vessel with a slightly offset rim and a thick base (fig. 6b), and a fragment of a clay disc decorated with groups of parallel incised lines (fig. 6c).

Among the flints was a fragment of a thick-butted axe of type B (fig. 6e) and a scraper made from a small flint nodule.

The better preserved house A only yielded an insignificant amount of primary material including a fragment of a vessel with an incised V-ornament below the rim from the infilling of one of the large roof supports (fig. 6f). The tempering and decoration are very similar to that of the “tulip-shaped” vessel from house B. The outer fill from the posts of house A contained odd

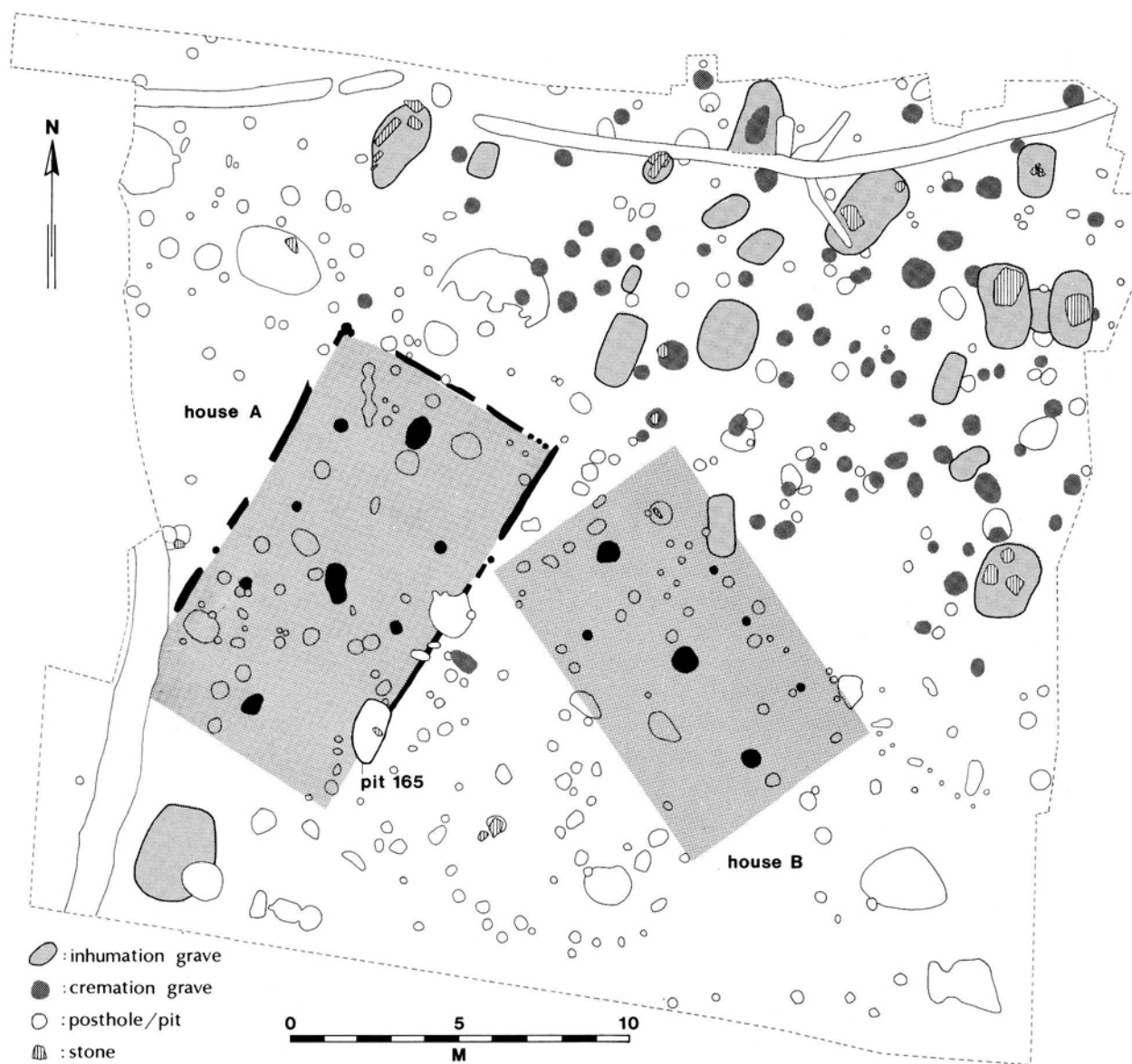


Fig. 2. Plan of the central excavation area at Grødbygård showing the Middle Neolithic houses A and B.

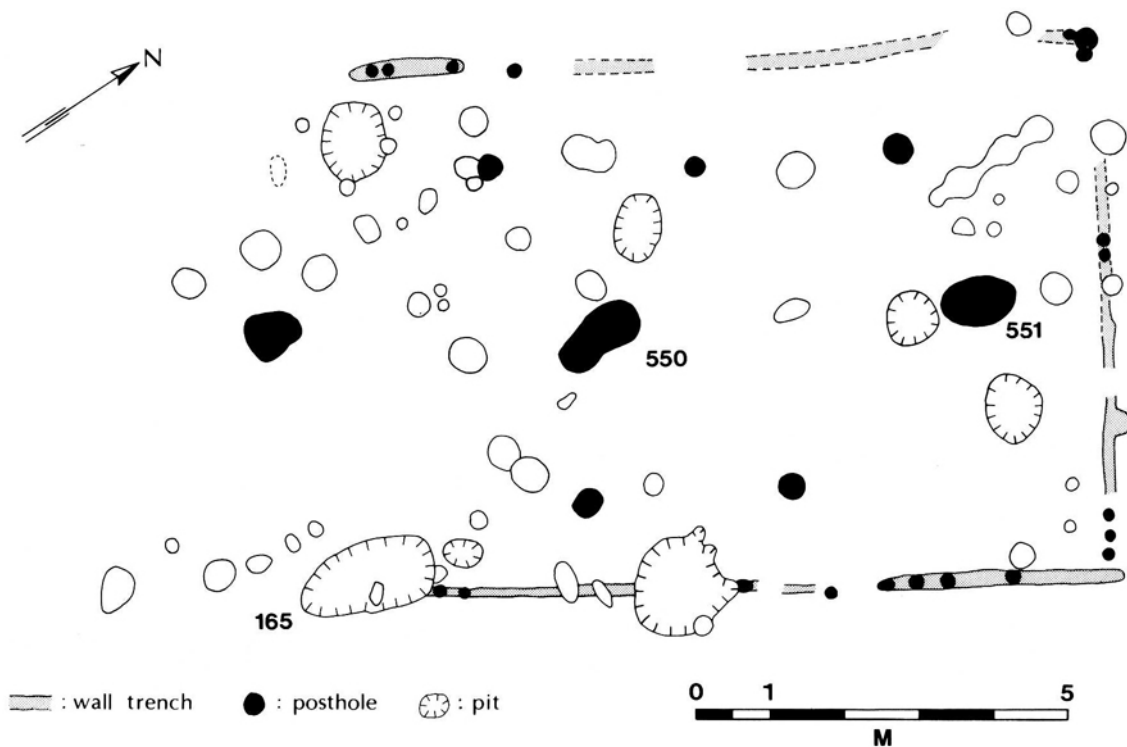


Fig. 3. Detailed plan of Grødbygård house A.

sherds and a fragment of a clay disc of Early Neolithic C/Middle Neolithic I (EN C/MN I) type.

In spite of the fact that house A did not provide much material for a primary date it is possible indirectly to establish an upper age limit for the construction of the house. A pit (165) containing abundant ceramic material of a homogeneous character cuts the wall trench. Apart from odd EN C sherds, which can be clearly separated from the bulk of younger material, the pit contained a number of noteworthy elements (figs. 7–8). The types of vessels include conical pots with a slightly accentuated transition from belly to neck decorated with horizontally arranged rows of pits below the rim (fig. 8 d, f, h, i), bowls with deeply inserted pits below the rim combined with obliquely incised lines bounded below by horizontal rows of small pits (fig. 8a, b), undecorated bowls (fig. 8g), and bowls decorated only with rows of pits (fig. 8e). Of particular interest in this assemblage are several fragments of a semi-globular bowl with a zone of horizontally impressed cord below the rim bounded by a fringe ornament consisting of short

oblique cord impressions (fig. 8a). The latter is considered to be a vessel of early Boat-Axe type related to Malmer's early A/B type; though the vessel does differ slightly in the profile of the rim (Malmer 1962, 9 *et seq.*).

Other decorative elements derived from the pit 165 comprise incised vertical lines below the rim (fig. 8,l), nail impressions, the latter in combination with moulding and pits (fig. 8, c, i, k). A number of fragments of funnel beakers with incised V-ornaments below the rim are of the same type as that from one of the large roof-supports of house A (fig. 8b and c) (cf. fig. 6f). Clay discs of this type are common in a number of settlement sites in Scania and Blekinge. In the so called G-layers of Siretorp, normally ascribed to the Pitted Ware Culture, were found several fragments of similar clay discs (Bagge and Kjellmark 1939, Pl. 50:3–6). The type is also represented at Jonstorp M3 (Lidén 1940, fig. 68:2,4,6). Several examples are found on the settlement site of Sillnäs Udde in Blekinge (Lönnberg 1933, fig. 10:13). A single fragment is known from the site at Svanemøllevej on Sjælland (Davidsen 1973, fig. 12:5). Clay discs with



Fig. 4. Grødbygård house A with its wall trench. Seen from the north. BMR phot.

this type of decoration are now normally dated to MN V (Davidsen 1973, 29).

It is now generally agreed that the “tulip-shaped” beakers should be dated to the end phase of the TRB Culture (MN V) (Ebbesen 1975, 108).

With this background there can hardly be any doubt that the two houses Grødbygård A and B belong to the final phase of the TRB Culture and certainly no later than the transition MN V/ Early Boat-Axe Culture. Both phases are clearly represented at Grødbygård. Thick-butted axes of type B, which are attributed to the Boat-Axe Culture and Pitted Ware Culture, are also present in the Grødbygård material (fig. 10). All in all the pit 165 seems to represent the transitional phase Funnel-Beaker Culture/Boat-Axe Culture.

The final Funnel-Beaker phase, MN V, is well represented in the Grødbygård material in general (fig. 9). Especially characteristic are clay discs decorated with concentric semi-circles with a fringe of small strokes at right angles (fig. 9d). Clay discs decorated in a similar way occur in the settlements of Karlsfält 16:11 (Larsson and Larsson 1984, fig. 35) and Hagestad 7:6 (Hulthén 1977, fig. 93c). The incised V-ornament and “fir-twig” ornament below the rims of certain vessels (fig. 9a)

seem specially common in Hagestad 7:6 (Hulthén 1977, fig. 95a-b and fig. 83e). Pottery with moulding and finger nail impressions similar to that of pit 165 (fig. 8c) is present at both Hagestad 7:6 and Jonstorp M3 (Hulthén 1977, fig. 94a-b). Hulthén suggests that the material from Hagestad 7:6 belongs to the Pitted Ware Culture, but indicates that it differs from both TRB and

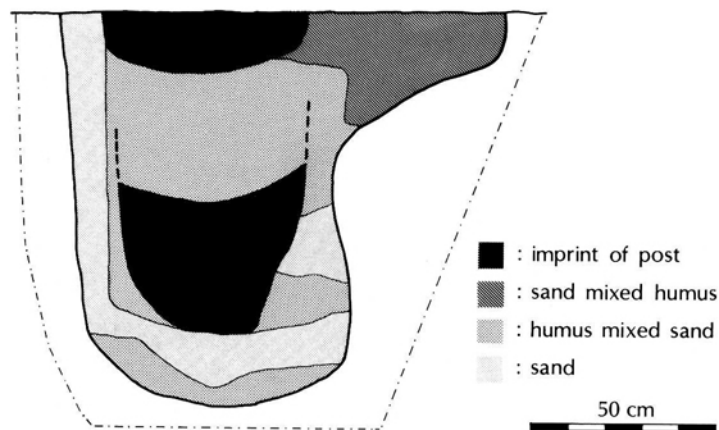


Fig. 5. Section through a large roof support (no. 551) of Grødbygård house A.

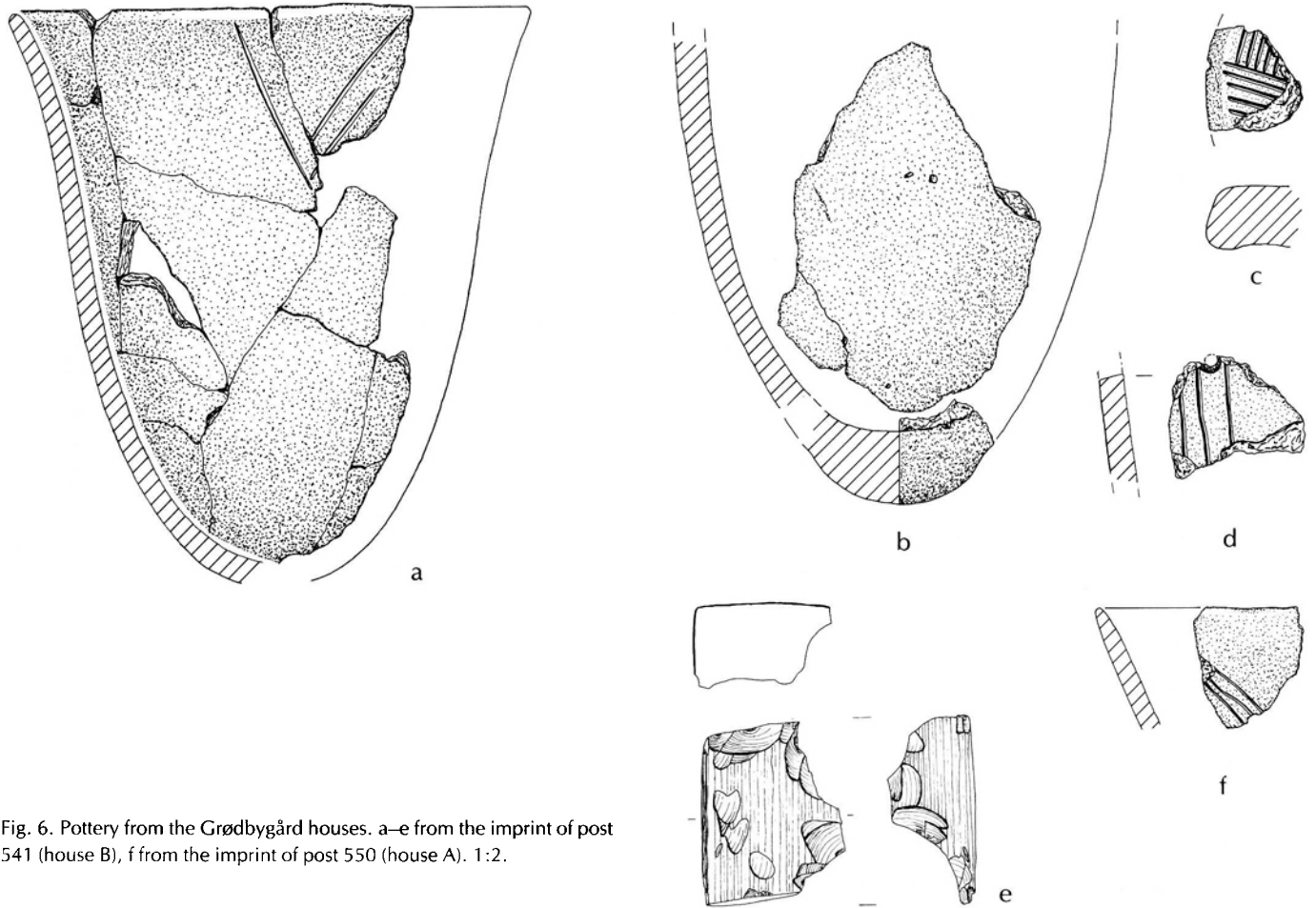


Fig. 6. Pottery from the Grødbygård houses. a–e from the imprint of post 541 (house B), f from the imprint of post 550 (house A). 1:2.

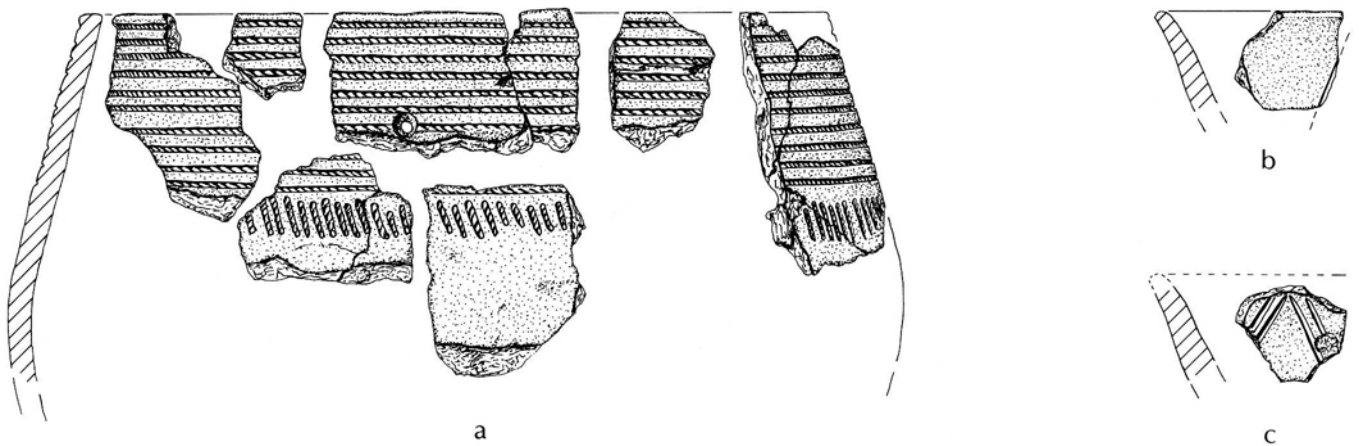


Fig. 7. Pottery from the pit Grødbygård 165. 1:2.

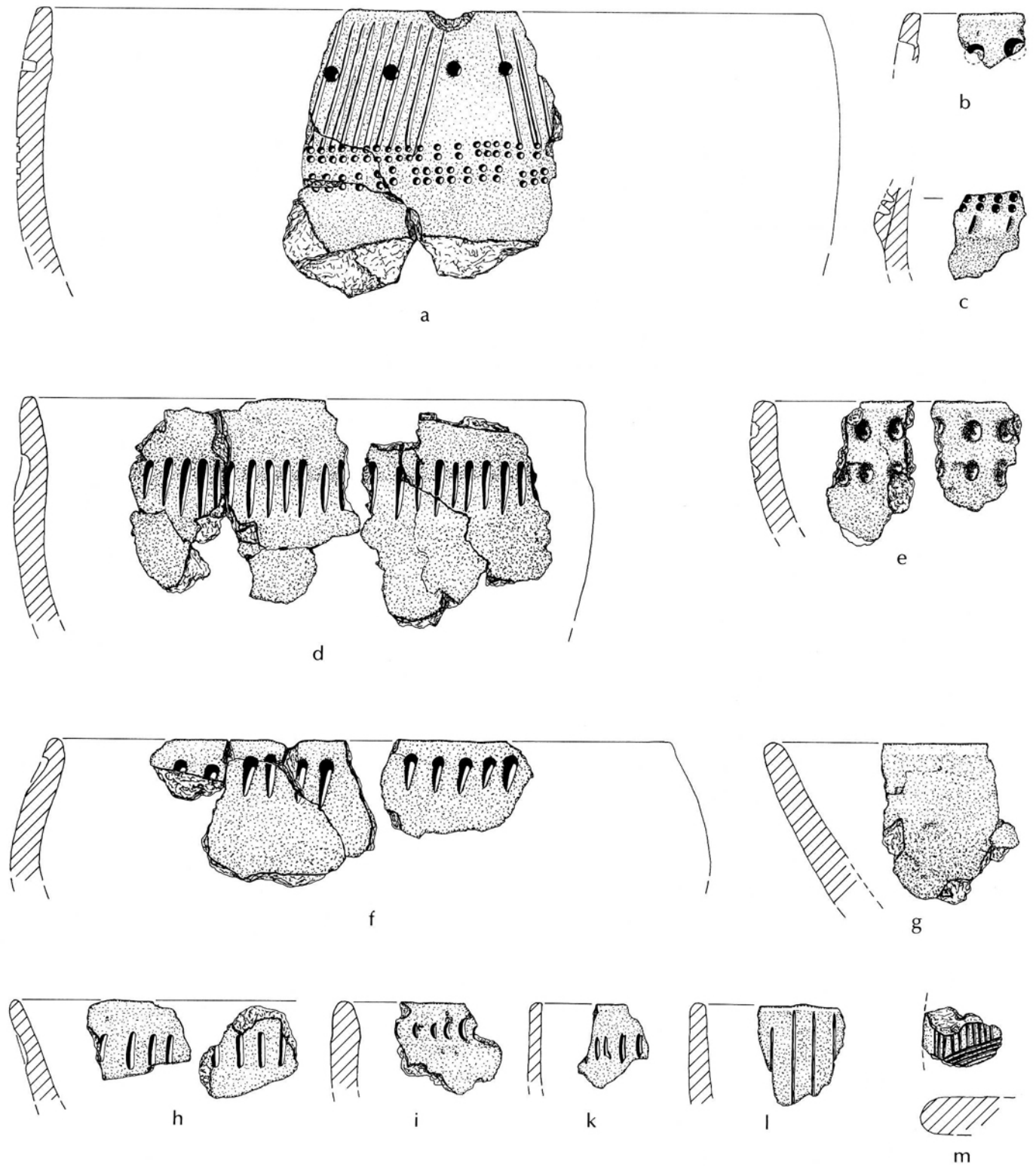


Fig. 8. Pottery from the pit Grødbygård 165. 1:2.

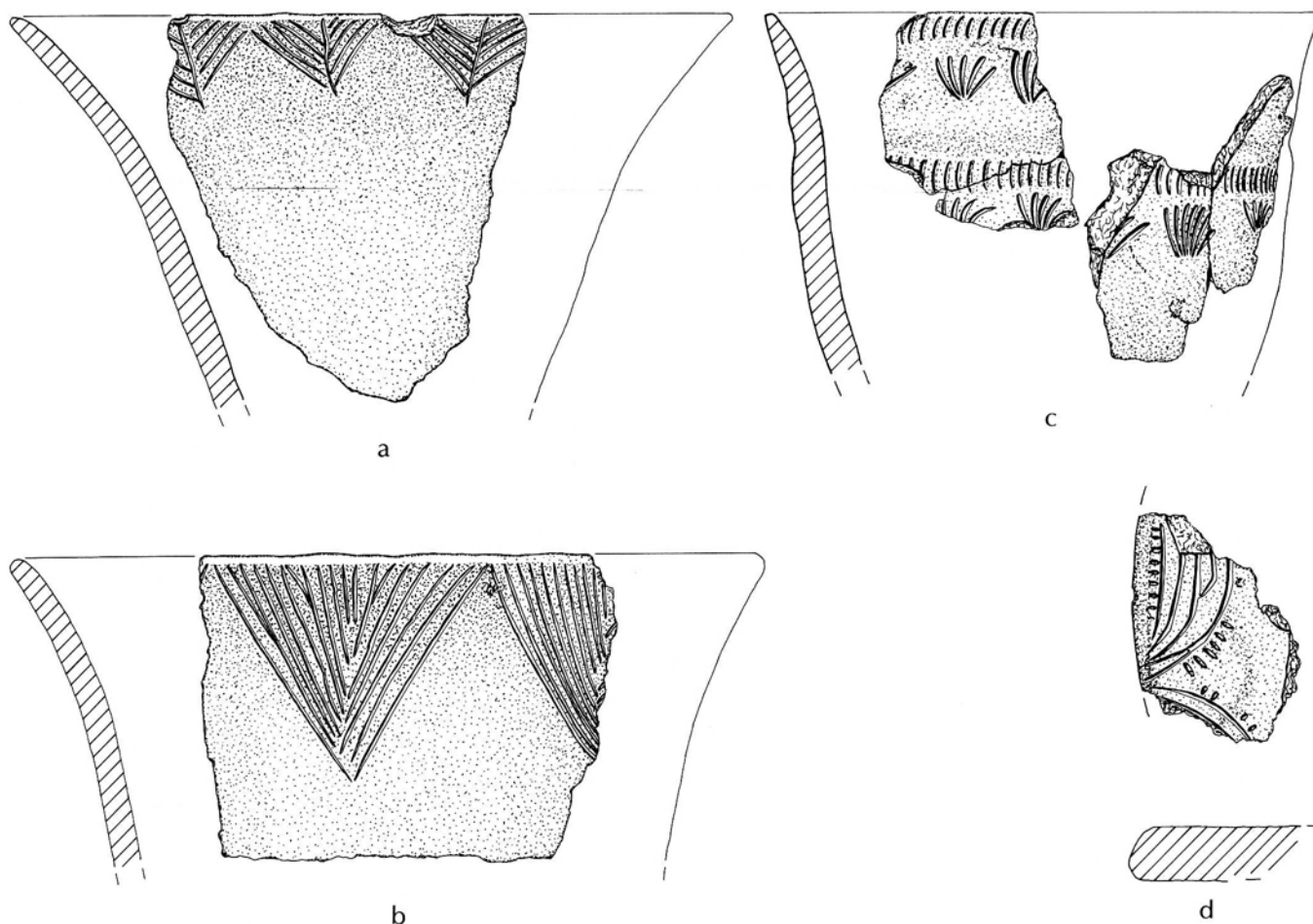


Fig. 9. Pottery from various post holes on the Grødbygård site. c and d were found in the same post hole. 1:2.

other material from the Pitted Ware Culture (Hulthén 1977, 123). Karlsfält 16:11 is regarded as late TRB (Larsson and Larsson 1984, 65). On the basis of the new material from Grødbygård and Limensgård (Nielsen and Nielsen, this vol. fig. 5–6) there seems no doubt that Hagestad 7:6 should be regarded as late TRB. This also implies that MN V, contrary to Davidsen's statement (1978, 163), is present in both Scania and Bornholm. It has already been suggested that the boundary between TRB and Pitted Ware Culture is difficult to define towards the final phases of the TRB. New material from both Scania and Bornholm suggests that the late TRB follows a different trend than in the rest of Denmark being clearly influenced by the Pitted Ware Cul-

ture. This is particularly obvious in the shapes of the vessels, which, however, *do* continue the TRB tradition.

To complete the presentation of the Neolithic houses from Grødbygård, it should be mentioned that the remains of several other houses were recorded, including at least one of Late Neolithic age. Due to the overlap with the Iron Age grave field no clear house plans could be established.

RUNEGÅRD EAST

The distribution of finds within the part of the investigated area of nearby Runegård, shown on fig. 12,

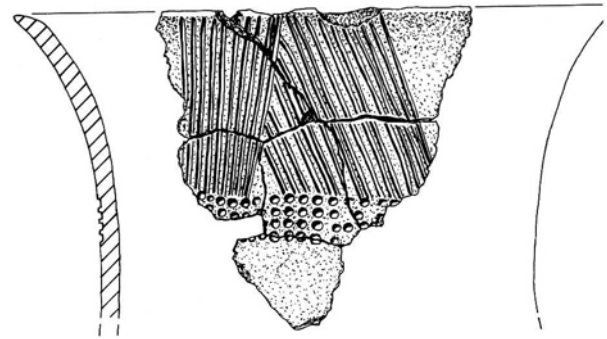
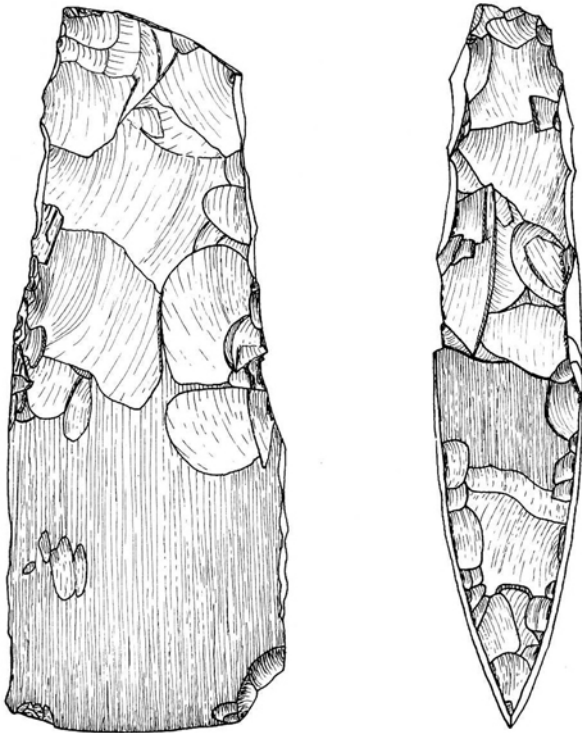


Fig. 11. Fragment of funnel beaker from Runegård East, site 4. 1:2.

Fig. 10. Thick-butted axe of type B with secondary trimming of the butt end, possibly belonging to house B. 2:3.

indicates a number of well defined settlement areas each representing different and relatively “pure” phases of the Middle Neolithic TRB Culture.

Site 1 lies within a totally excavated area and consists of a large and fairly dense concentration of finds, partly protected, but also “perforated” by intense building activity in the Early Iron and Viking Ages. Much of the material originates from old soil horizons, but at least one definite house site can be distinguished among the remains of later date (fig. 13). The house appears to have had only two major roof supports each with a diameter of approximately 20 cm sunk at least 50 cm into the subsoil and a number of subsidiary posts of “wall-type”. The house was orientated NW-SE measuring approximately 9.5 × 6.0 m. The fill of the post holes is of identical description consisting of a dark brown post imprint surrounded by a paler grey-brown sand. A second set of roof-supports, very close to the first, indicates that the house was either renewed or repaired. Though both holes for the second set of major roof supports closely match the first in both shape, size and fill, one of them (376) contained a large, bottomless, but otherwise complete vessel standing upright in the centre of the hole (fig. 14). Whether or not it had contained a post may be open to discussion, but its association

with the house seems unquestionable. The slightly irregular line of wall posts indicates the presence of more than a single building phase.

The vessel from the hole (376) no doubt belongs to the funnel-beaker family, but is of a rather unusual type. However, parallels are known from southern Sweden. A vessel from Käglingavägen is of a similar shape but is undecorated (Larsson, M. 1984, 60). It was found in a pit associated with a sherd with whipped cord impressions. There were no signs of later disturbance which may have brought younger material into the pit indicating a date no earlier than EN C/MN I. Vessels of similar form occur in the upper “S-layer” of Siretorp (Bagge and Kjellmark 1939, Pl. 58). The characteristic decoration of small triangular pits marking the transition from belly to neck also occurs in the same strata at Siretorp (Bagge and Kjellmark 1939, Pl. 68:5 and 68:10). The use of the Siretorp material for detailed chronological studies should be avoided due to its somewhat mixed character. It should be noted, though, that material of EN C and MN I character commonly occurs in the upper S-layers. Hence it seems most likely that the pot from the house at site 1 of Runegård East belongs to the transition period EN C/MN I or at the latest to the beginning of MN I. An earlier date

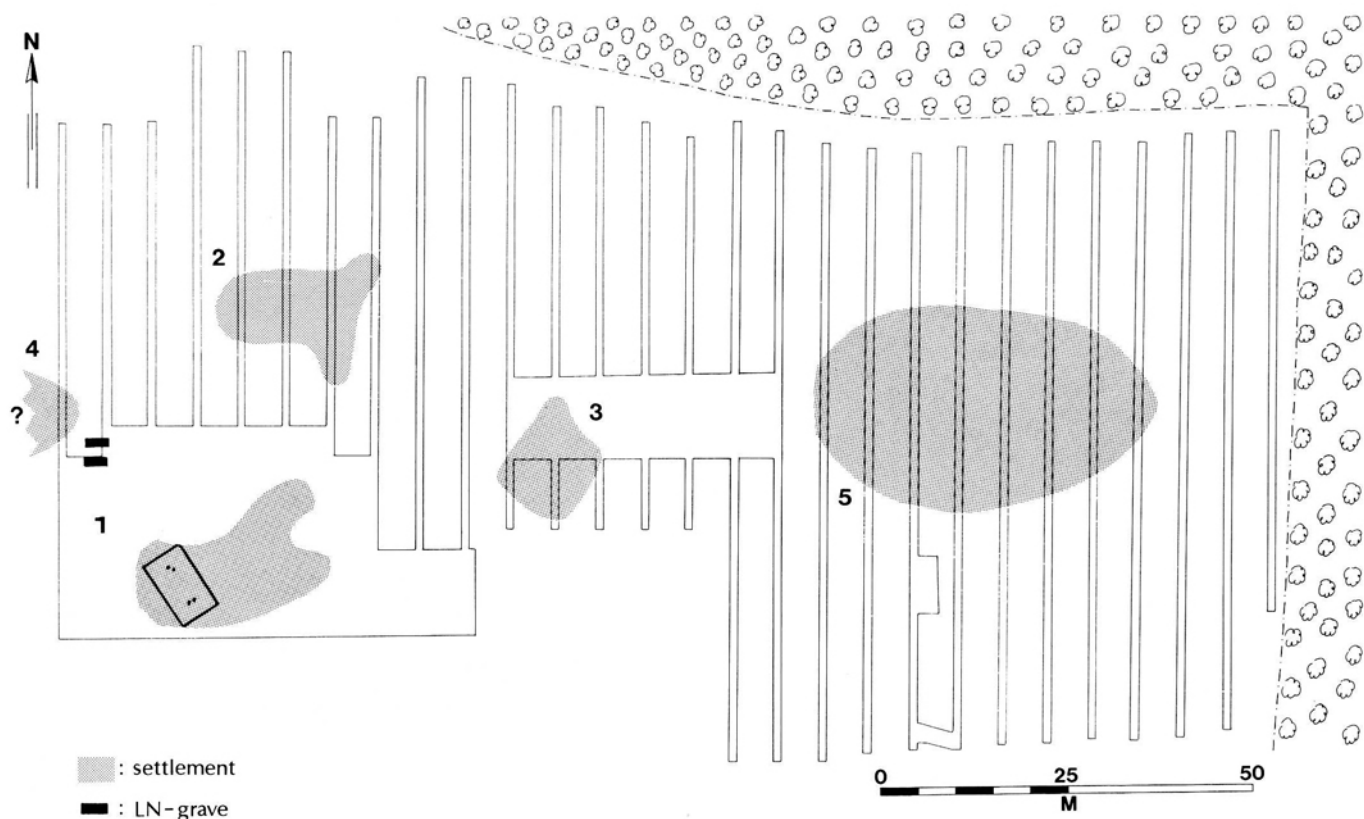


Fig. 12. Plan of the settlement area of Runegård East with indication of excavated areas and survey trenches.

may be precluded due to the absence of unmistakable EN C material on the site. Considering the density of finds of MN I character in the immediate vicinity of the house at Runegård site 1 it seems unavoidable that at least some of the immense number of sherds would have got into the fill of the post holes during the construction of the house, if it had taken place later than MN I. In this connection it should be noted that large numbers of sherds of MN pottery occur in the fill of nearly all later structures including Iron and Viking Age post holes. With this background it seems most likely that the Runegård house was built about the transition EN C/ MN I.

Large, compact heaps of sherds clearly belonging to MN Ia and MN Ib show that the settlement on site 1 continued and was intensified during the early MN. But so far no houses from this phase have been recorded. Among the more common types of vessels are funnel-beakers with a line of pits below the rim and vertically striped bellies (fig. 15a). Whipped cord ornamentation

occurs on a number of pots, sometimes in combination with other elements (fig. 15e, f, g). A bowl with an almost cylindrical neck is covered with a two stranded cord ornament (fig. 15d).

Pottery of MN Ib type is represented by pedestalled bowls and clay discs. While pottery of unquestionable MN II character does not appear in this concentration a small part of the material may be ascribed to MN III. This includes bowls with a combination of pits and triangular or zig-zag bands filled with dentate stamp ornamentation.

Site 2 includes a concentration of finds spanning 3–4 survey trenches, corresponding to 15–20 m (fig. 12). The site, which comprises several compact heaps of sherds, has been only partly excavated. The presence of several major roof-supporting posts seems promising for future detailed excavation of the site. Compared to site 1, site 2 seems clearly younger with fragments of shouldered vessels with a rather slack or indistinct profile. The decorative elements comprise zig-zag bands

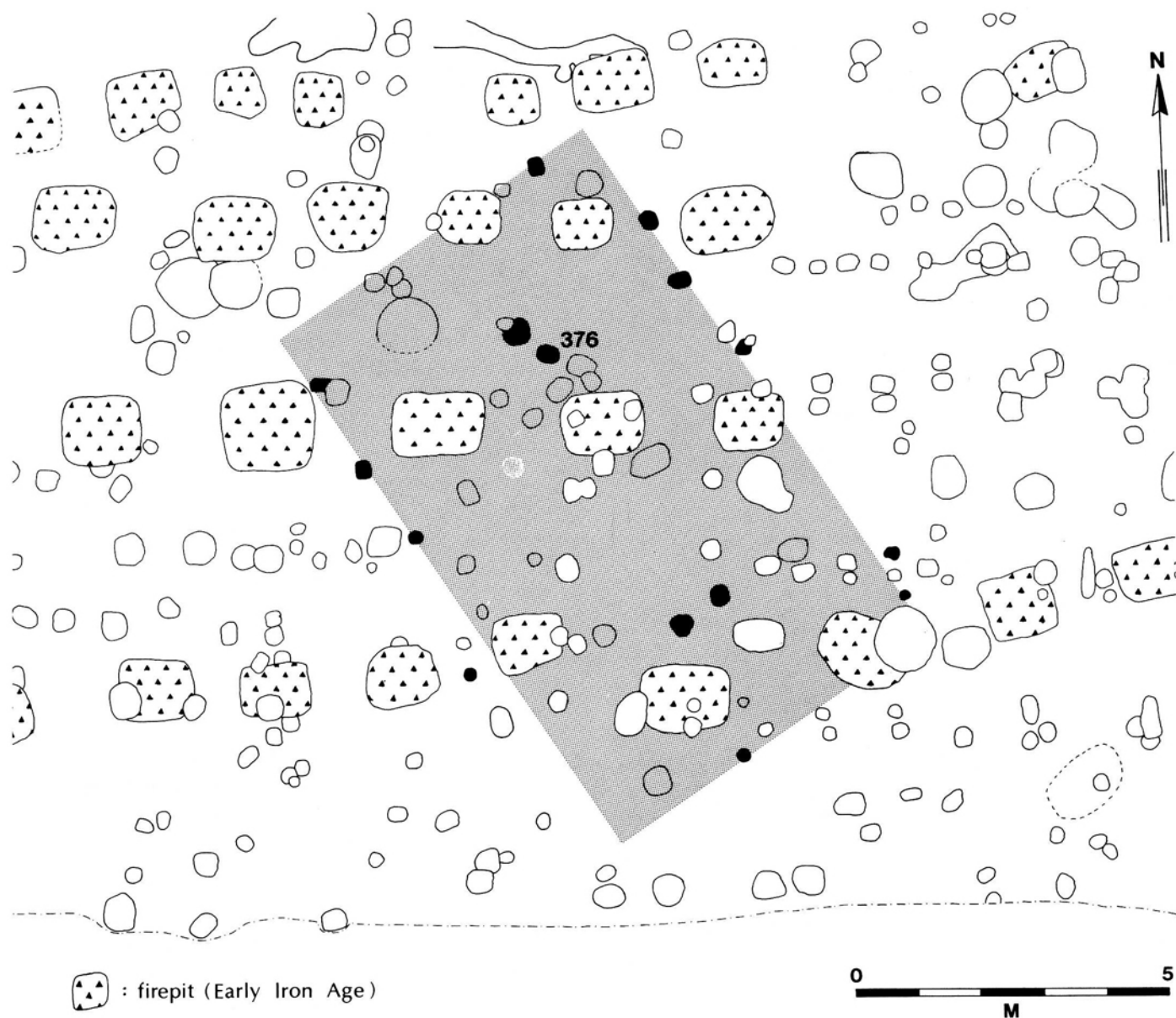


Fig. 13. Part of the totally excavated area of Runegård East with the early Middle Neolithic house (site 1).

below the rim and vertical bands filled with dentate stamp impressions on both neck, shoulder and belly. Belly decoration includes vertical “stab-and-drag” lines and occasional whipped cord. A fragment of a pedestalled bowl is considered to be introduced from site 1. Large storage vessels were also found on site 2 lying in thick and completely undisturbed heaps. The same applies to some clay discs covered with deeply cut circular stamp ornaments or with deeply incised concentric circles.

As a whole the finds from site 2 may be placed within MN II and possibly MN III.

The finds from *site 3* are much more imperfectly preserved originating from a redeposited soil horizon. However, the selection of ornament types differs clearly from the previous sites. Most common are different sorts of zig-zag lines below the rim, incised triangles and pits. Fragments of clay discs with cross-hatching or groups of incised lines occur. A tentative date of MN IV is suggested for this material.

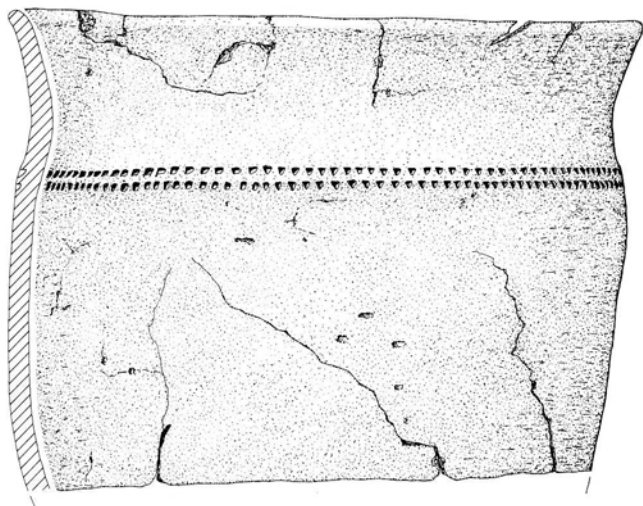


Fig. 14. Vessel from post or pit 376 of early Middle Neolithic age from Runegård East, site 1 (House A). 1:3.

The material from *site 4* is at present limited to finds from an at least slightly redeposited layer in the westernmost of the survey-trenches (fig. 12). The concentration appears to represent the edge of a larger, yet uninvestigated site. Of particular interest are fragments of a pot with a strongly everted rim decorated with groups of obliquely incised lines bordered below by a band of small circular pits (fig. 11). This form of decoration is matched in detail on semi-globular vessels from pit 165 at Grødbygård (fig. 8a) and from site 5 (below) as well as in the late MN house at Limensgård (Nielsen and Nielsen, this vol. fig. 5f-g). The material available meantime from Runegård site 4 indicates a date towards the end of the TRB.

Site 5 comprises finds from primary layers as well as old soil horizons in the survey trenches (fig. 12). The occurrence of post holes indicates the presence of houses which may be worthy of future investigation.

Much of the material available originates from a single pit (1108), the contents of which are closely related to that of Grødbygård pit 165 (cf. fig. 7–8). An additional element here is a rim fragment of a vessel of apparent Valby-type A (Davidsen 1978, 97 and fig. 50a). Vessels of this type have so far not been recorded on the Grødbygård site. Site 5 as a whole, and pit 1108 in particular, seems to belong very late within the TRB Culture.

DISCUSSION

The finds from the pits Grødbygård 165 and Runegård 1108 in particular indicate greater complexity when attempts are made to define chronological phases against “cultural” units towards the end of the MN. Further progress may be made only through continued investigation of closed and uncontaminated units. The interaction between the late TRB on one side and the Pitted Ware Culture on the other and their combined relationship to the Boat-Axe Culture seem most feasibly studied in close correlation with the development in southeast Scania.

The above selection of finds shows that settlement in the Grødby area must have been continuous starting some time during the Early Neolithic Period. While finds of EN B character occur only sporadically EN C is well represented at several localities by fragments of characteristic pottery as well as thin-butted axes.

The Early Neolithic settlement is supplemented by an inhumation grave with a cord-ornamented “B-beaker” closely resembling the one often depicted from Koføedgård (i.a. Glob 1952 no. 7).

The presence of at least one passage grave (Jættedal) 500 m WNW of the settlement area fits the above evidence of a massive and stationary settlement established already in the early MN. The possible site of another megalithic tomb in the vicinity is mentioned by E. Vedel (1886, 248–49, 259), but no details of this are known. It may be worth noting that both megalithic tombs are situated on the far side of Grødby Å.

Burials from the later phases of the TRB Culture are so far not documented in the area, while one burial in a stone cist may be ascribed to the Battle-Axe culture. The grave was first investigated in 1876 and in it was found a flint axe with a hollow-ground edge (Vedel 1886, 250). During excavations in 1984 in the area “Runegård West” the remains of a stone cist was discovered showing signs of disturbance which may well have been caused by the earlier excavation. Close to the remains of the cist, and possibly in a secondary position, was found a flint axe of B-type attributed to the Boat-Axe Culture and the late Pitted Ware Culture (Nielsen 1977, 52).

A Late Neolithic settlement in the Grødby area is recorded sporadically by the presence of, for example, coarse bucket-shaped vessels with moulding. So far no house remains, even remotely comparable to those at

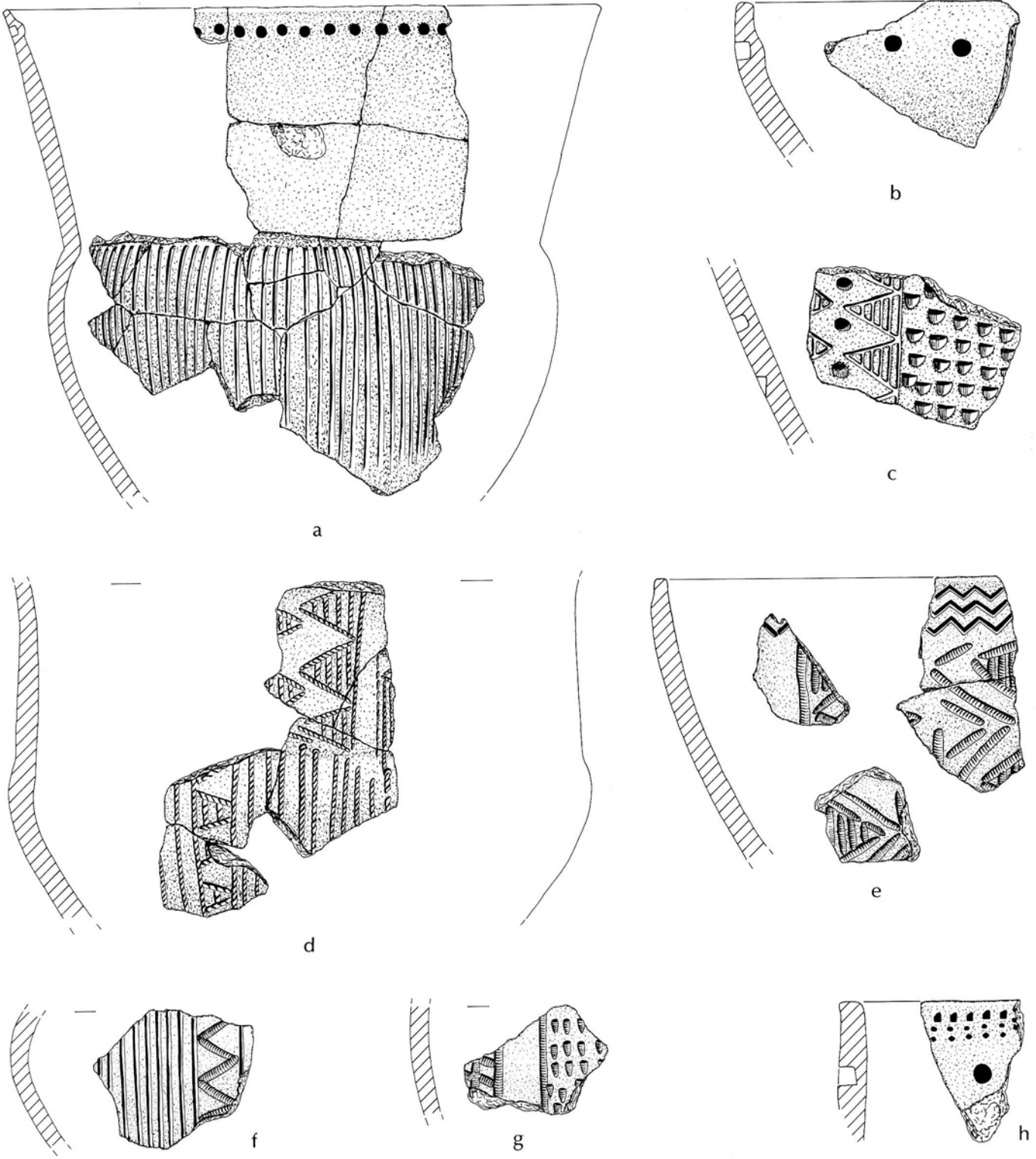


Fig. 15. Pottery from the cultural layer of Runegård East, site 1. 1:2.

Limensgård, have been recognised, but two stone cists placed side by side may be dated to this period on the basis of a flint dagger of Lomborg's type IIA (Lomborg 1973, 44). Stray finds indicate that the settlement may have consisted of several smaller units similar to those known from the later Middle Neolithic period.

In their presentation of the MN I settlement at Hanstedgård Eriksen and Madsen summarise and discuss the hitherto known or postulated houses of Middle Neolithic Age (Eriksen and Madsen 1984, 81). They reach the depressing conclusion that so far no satisfactory documentation has been presented for substantial houses of this period.

The presentation of several near contemporaneous houses from Grødbygård (above) and Limensgård (Nielsen and Nielsen, this vol.) built on an apparently identical plan, is considered sufficient evidence for the presence of fully developed post-built houses in the Middle Neolithic. Late Neolithic houses of the Limensgård type form a natural further development on the same basic pattern. The remains of houses dating from the onset of the MN period (Runegård site 1) indicate that the development of substantial post-built houses had begun already at this early age.

Skaarup's unwillingness to accept that the builders of intricate megalithic tombs for the dead were incapable of building substantial dwellings for the living has fortunately proved justified (Skaarup 1982, 39–52).

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NOTE

1. Sognebeskrivelsen (Central Register) nos. 202 and 205, Aaker parish; Bornholms Museum j.nr. 677 (Runegård East and West), j.nr. 948 (Grødbygård), j.nr. 944, 1004 and 1105 (various minor sites). The excavations were financed by *Bornholms Museum*, *Rigsantikvaren*, *Fredningsstyrelsen*, The Danish Research Council for the Humanities, and *Harboes Fond*.

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