The proper way of dwelling at the Early Neolithic gathering site of Almhov in Scania, Sweden

Rudebeck, Elisabeth; Macheridis, Stella

Published in:
Neolithic Diversities/Acta Archaeologica Lundensia, Series In 8°

2015

Citation for published version (APA):
In the study of the distant human past, certain events and periods have come to represent decisive passages from one human state to another. From a global perspective, the characteristic feature of the last ten thousand years is that people in different parts of the world, and at different points in time, started to grow plants and domesticate animals. The rise and dissemination of agriculture were crucial factors for the continued existence of humankind on earth.
Neolithic Diversities

Perspectives from a conference in Lund, Sweden

Editors:
Kristian Brink, Susan Hydén,
Kristina Jennbert, Lars Larsson & Deborah Olausson
Contents

Preface

I. PERSPECTIVES ON PEOPLE, IDENTITY AND PRACTICE

Paleodemography of maritime hunter-gatherers and the quest for forager baseline demography
Torbjörn Ahlström

Neolithic depositional practices at Dösemarken – a discussion of categorization
Åsa Berggren

New insights into early farming practice and diet from stable isotope analysis of crop assemblages
Amy Bogaard

Growth and decline?
Population dynamics of Funnel Beaker societies in the 4th millennium BC
Martin Hinz

The cultural encounters of neolithization processes
A discussion of different ways to understand plurality
Anders Högberg

Creolization processes in the later south Scandinavian Neolithic
An approach to cultural heterogeneity
Rune Iversen

Cultural identity?
The Middle Neolithic Pitted Ware complex in southern Scandinavia
Kristina Jennbert

Agency, creolization and the transformation of tradition in the constitution of the earliest Neolithic in southern Scandinavia
Mats Larsson

Animal husbandry and social identities during the Neolithic in southern Sweden
Ola Magnell

The Neolithic house as a procurement, production and consumption unit
The case of the Late Neolithic at Çatalhöyük
Arkadiusz Marciniak

Burial in the Swedish-Norwegian Battle Axe Culture: questioning the myth of homogeneity
Deborah Olausson

A tale of the tall
A short report on stature in Late Neolithic–Early Bronze Age southern Scandinavia
Anna Tornberg

7

11

21

33

43

52

58

66

75

80

89

98

107
II. PERSPECTIVES ON MONUMENTS

Frydenlund – Early Neolithic settlement and “barkaer” structures in the Sarup area
Niels H. Andersen

Megaliths and timber structures in northeast Scania, Sweden
Anders EdRing

The Hamremoen enclosure in southeastern Norway
An exotic glimpse into the process of Neolithization
Håkon Glørstad and Steinar Solheim

Occupy time!
The construction of design and monuments in Tiefstich central Europe
Johannes Müller

Transforming place and architecture through cremation
Cremation traditions at the third millennium BC monument complex at Forteviot, central Scotland
Gordon Noble and Kenneth Brophy

The proper way of dwelling at the Early Neolithic gathering site of Almhov in Scania, Sweden
Elisabeth Rudebeck and Stella Macheridis

The diversity of settings
Ritual and social aspects of tradition and innovation in megalithic landscapes
Almut Schülke

News from Frälsegården
Aspects of Neolithic burial practices
Karl-Göran Sjögren

III. PERSPECTIVES ON MATERIAL CULTURE

An ABC of lithic arrowheads
A case study from southeastern France
Kevan Edinborough, Enrico R. Crema, Tim Kerig and Stephen Shennan

The scent of sandstone – exploring a TRB material
Susan Hydén

Fragmentation during the Neolithic
Transformation and enchainment from a south Swedish perspective
Lars Larsson

Michelsberg and Oxie in contact next to the Baltic Sea
Doris Mischka, Georg Roth and Katrin Struckmeyer
Preface

In the study of the distant human past, certain events and periods have come to represent decisive passages from one human state to another. From a global perspective, the characteristic feature of the last ten thousand years is that people in different parts of the world, and at different points in time, started to grow plants and domesticate animals. The rise and dissemination of agriculture were crucial factors for the continued existence of humankind on earth. The incipient agriculture is often regarded as the very beginning of human culture, as it has traditionally been perceived in western historiography, that is, as control over nature and the “cultivation” of intellectual abilities.

As a result of the increasing national and international interest in the northern European Neolithic (4000–2000 BC), combined with large-scale archaeological excavations which helped to nuance and modify the picture of the period, senior researchers and research students formed a Neolithic group in 2010. The Department of Archaeology and Ancient History at Lund University served as the base, but the group also included collaborators from Linnaeus University and Södertörn University, and from the Southern Contract Archaeology Division of the National Heritage Board in Lund and Sydvensk Arkeologi in Malmö and Kristianstad.

Meetings and excursions in the following two years resulted in the holding of an international conference in Lund in May 2013 entitled “What’s New in the Neolithic”. Invitations to this conference were sent to two dozen prominent Neolithic scholars from northern and central Europe.

The conference was a great success, with presentations and discussions of different aspects of innovative research on the Neolithic. The members of the Neolithic group took an active part in the discussions following the presentations.

It was decided before the conference that the papers would be published. The members of the Neolithic group also had the opportunity to contribute current research to this publication.

After the conference an editorial group was set up, consisting of Dr Kristian Brink, PhD student Susan Hydén, Professor Kristina Jennbert, Professor Lars Larsson and Professor Deborah Olausson.

A grant was received from Riksbankens Jubileumsfond for the meetings and excursions of the Neolithic group 2010–2013. We would like to thank The Royal Swedish Academy of Letters, History and Antiquities and Berit Wallenbergs Stiftelse for grants which enabled us to hold the conference “What’s New in the Neolithic”. Grants from The Royal Swedish Academy of Letters, History and Antiquities, and Stiftelsen Elisabeth Rausings Minnesfond financed the layout and printing of this publication.
II. PERSPECTIVES ON MONUMENTS
The proper way of dwelling at the Early Neolithic gathering site of Almhov in Scania, Sweden

Elisabeth Rudebeck and Stella Macheridis

Abstract

The Early Neolithic (c. 4000–3500 BC) site of Almhov, located in southwestern Scania, Sweden, is interpreted as a gathering and feasting site, subsequently transformed into a burial site with ancestral monuments. The focus of the article is on the pit pairs and pit clusters at the site, and on the differential distribution of artefacts and animal bones within them, thereby touching upon more general topics such as material culture patterning, structured deposition and the categorization of animals during the Early Neolithic.

Introduction

The Almhov site in southwestern Scania was excavated by Malmö Heritage in 2001–2002, as part of the City Tunnel Project, which cleared the ground for the new railway around the city of Malmö (Figs. 1 & 2). Ten hectares of topsoil were cleared by excavators, revealing pits and burials from the Early to the Middle Neolithic and longhouses from the Late Neolithic–Early Bronze Age and the Early Iron Age (Gidlöf 2006, 2009; Gidlöf et al. 2006; Brink 2009). The features were located on a low hillock, about 14 metres AMSL. From this level the terrain sloped gently towards the west and east. To the east of the site there was once a bog which was artificially drained in modern times. The distance from Almhov to the coast during the Early Neolithic was about 1.5 kilometres.

Of the roughly 320 Early and Middle Neolithic features on the site, the majority were dated to the earliest phase of the Early Neolithic (EN I), c. 4000–3500 BC. Among the features were about 200 pits as well as traces of four façade structures with adjacent burials and two dolmens (Gidlöf et al. 2006). Of the pits, around 190 were dated to the earliest phase of the Early Neolithic. One façade structure had traces of a ploughed-out long barrow to the west of the façade. The Early Neolithic artefacts, which were mainly found in the pits, include approximately 700 kilos of worked flint and flint tools, 390 kilos of pottery, 160 kilos of used and worked stone and 41 kilos of animal bones.

The abundance of pits and the large amount of artefacts and animal bones distinguishes Almhov from other known sites from the earliest Early Neolithic (cf. Fig. 3). Most known sites from this period in Scania and adjacent areas appear to have been much smaller (Lars-son 1984; Malmer 2002; Andersson 2004;
Fig. 1. Map of Almhov with all features from the Early Neolithic and early Middle Neolithic. The longhouse northeast of the pit concentration was dated to the Early Neolithic II – Middle Neolithic A.
Fig. 2. Aerial photo of Almhov during the excavation in 2001. Photo: Perry Nordeng.

Fig. 3. Diagram showing the amount of various categories of flint tools from Almhov and other well-known sites from the Late Mesolithic (Löddesborg area 1 & 3) and Early Neolithic in western Scania and from the early TRB site Siggeneben-Süd in Schleswig-Holstein. Sources: Löddesborg, Jennbert 1984; Oxie no. 7 (surface collection), Svenstorp, Skabersjö 26:20, Stolpalösa and Bellevuegården, Larsson 1984; Siggeneben-Süd, Meuers-Balke 1983; Kristineberg feature A200 (occupation deposit below two long barrows), Rudebeck & Ödman 2000.
Rudebeck 2006, with cited references). This may partly be due to the delimitation of the excavated areas, and in the case of Oxxie no. 7 the finds were collected from the surface, but it is clear that Almholv-type sites were not common. Based on analogies with anthropologically and archaeologically ascertained feasting sites from different parts of the world (Dietler & Hayden 2001; Twiss 2008), Rudebeck (2010) has interpreted Almholv as a gathering and feasting site.

In this paper we discuss the possible significance of patterns in the distribution of artefacts and animal bones in the pit pairs and pit clusters at Almholv. The main purpose is to consider the structure of the dwelling, waste management and possible categorizations of animals and animal body parts during the earliest phase of the Early Neolithic.

Pit patterns
Although not all pits at Almholv were excavated, it was estimated that roughly 190 pits were from the Early Neolithic (Gidlöf et al. 2006; Gidlöf 2009). At least 78 were placed in pairs

Fig. 4. Pit pairs and pit clusters at Almholv. Black: pits analysed as to contents and shown in fig. 6; grey: probable pit pairs/clusters, not excavated; unfilled: partly excavated pits, not included in the analysis. The façade structures with burials are shown in blue and the two dolmens are shown in grey.
and occasionally in clusters with three pits. The pairs and clusters were dispersed across the site, but with a concentration on the perimeter of a roughly circular area, measuring about 200 metres across. The following analysis is based on 58 excavated pits, making up 23 pairs and four clusters with three pits in each (Fig. 4). The remaining 20 pits were either not excavated or only partly excavated, and were therefore not included in the analysis.

The pits varied in size and depth, from one to roughly three metres across, and from 0.15 to 0.70 metres in depth (Fig. 5). Most of them contained two or three layers, and the artefacts and bones were mainly found in the top layer, thus reflecting activities adjacent to the pits. Radiocarbon analyses of organic material from 12 pits and the type of pottery and worked flint from the pits indicate that most of them were backfilled 3900–3700 cal. BC.

The first basic analysis of the 27 pairs and clusters reveals that one pit in each pair/cluster contained the vast majority of pottery, flint flakes, flint tools and animal bones, while the other (or the other two) was either devoid of finds or contained considerably less (Fig. 6). On average, the pit with the majority of artefacts within each pair/cluster contained 72% of the animal bones (weight), 69% of the pottery (weight), 73% of the flint flakes (number) and 73% of the flint tools (number) (Rudebeck 2010).

The amount of pottery in the pits varied between a few grams and almost 30 kilos. The minimum number of pots was estimated for 28 pits and was shown to vary between one and 60. A majority of pits contained sherds from 1–10 vessels. Vessels with a rim diameter of less than 15 centimetres were slightly overrepresented at Almhov, possibly indicating a focus on drinking.

Pottery from 56 pits was analysed as to
Fig. 6. Diagram of 58 pits in 27 pairs and clusters (P01, K01 etc., cf. fig. 4), grouped together and with each artefact category (number of flint flakes, number of flint tools, pottery weight and weight of animal bones) in per cent for each pit within each pit pair/cluster. In order to facilitate comparison, the bars representing each artefact category have been piled on top of each other, and the pit pairs/clusters have been arranged in the following order: from the most dissimilar pair, to the far left, to increasingly similar pairs/clusters, to the right. Each artefact category is represented by one bar with percentages for each pit. Hence, pit 232 in the pair K01, to the far left, contained 100% of the bones, pottery and flint tools and almost all of the flint flakes from the pit pair K01.
typological traits (pits in K18 and K29 are excluded because they were only partly excavated; cf. Fig. 4). Oxie type pottery, characterized by folded rims with round or simple dragged impressions around the rim, is the most abundant. However, Svenstorp type pottery, characterized by cord impressions, an increasing number of motifs on the rim and vertical decoration on the belly, is also present. The pottery types were distributed in the following way:

- in ten pairs/clusters both/all pits ($\sum = 21$) contained only Oxie type pottery
- in eight pairs one pit ($\sum = 8$) contained only Oxie type pottery while the other pit con-

<table>
<thead>
<tr>
<th>Feature no &amp; type</th>
<th>Dated material</th>
<th>Lab no. BP Cal. BC (2 o)</th>
<th>Associated pottery style</th>
<th>Red deer bone and antler</th>
</tr>
</thead>
<tbody>
<tr>
<td>A19098, pit</td>
<td>Animal bone*</td>
<td>Ua-21474 5415±110</td>
<td>4460-3980 Oxie</td>
<td>-</td>
</tr>
<tr>
<td>A19049, pit</td>
<td>Cereal</td>
<td>Ua-21383 5065±60</td>
<td>3970-3710 Oxie</td>
<td>x</td>
</tr>
<tr>
<td>A25594, pit</td>
<td>Hazel nut shell</td>
<td>Ua-21385 5055±70</td>
<td>3980-3690 Oxie</td>
<td>x</td>
</tr>
<tr>
<td>A39833, posthole in hut 13</td>
<td>Hazel nut shell</td>
<td>Ua-21384 5045±45</td>
<td>3960-3710 MN A (one sherd)</td>
<td>-</td>
</tr>
<tr>
<td>A6b (FU), pit</td>
<td>Cereal</td>
<td>Ua-17156 5000±95</td>
<td>3980-3630 Oxie</td>
<td>x (A6)</td>
</tr>
<tr>
<td>A1942, pit</td>
<td>Cereal</td>
<td>Ua-32530 5000±40</td>
<td>3950-3690 Oxie</td>
<td>x</td>
</tr>
<tr>
<td>A61 (FU)/A39437, posthole in façade 1</td>
<td>Cereal</td>
<td>Ua-17158 4990±70</td>
<td>3950-3650 -</td>
<td>-</td>
</tr>
<tr>
<td>A27048, pit</td>
<td>Pig bone</td>
<td>Ua-22166 4960±50</td>
<td>3940-3640 Oxi?</td>
<td>-</td>
</tr>
<tr>
<td>A32422, pit</td>
<td>Cereal</td>
<td>Ua-32532 4940±40</td>
<td>3800-3640 Oxi?</td>
<td>x</td>
</tr>
<tr>
<td>A3748, pit</td>
<td>Cereal</td>
<td>Ua-23873 4930±45</td>
<td>3800-3640 Oxi?</td>
<td>x</td>
</tr>
<tr>
<td>A35862, pit below Dolmen 1</td>
<td>Cereal</td>
<td>Ua-32533 4910±45</td>
<td>3790-3630 Oxie</td>
<td>-</td>
</tr>
<tr>
<td>A31888, pit</td>
<td>Cereal</td>
<td>Ua-32531 4880±45</td>
<td>3770-3530 Oxie</td>
<td>x</td>
</tr>
<tr>
<td>A1854, pit</td>
<td>Cereal</td>
<td>Ua-21382 4780±50</td>
<td>3660-3370 Svenstorp, in top layer</td>
<td>-</td>
</tr>
<tr>
<td>A300 (B), façade 5?</td>
<td>Cereal</td>
<td>Ua-33027 4660±40</td>
<td>3630-3350 Svenstorp</td>
<td>-</td>
</tr>
<tr>
<td>A437, burial**</td>
<td>Human bone</td>
<td>Ua-18757 4635±70</td>
<td>3650-3100 Svenstorp</td>
<td>-</td>
</tr>
<tr>
<td>A13529, a well below Dolmen 2</td>
<td>Cattle bone</td>
<td>Ua-22167 4605±50</td>
<td>3550-3100 Oxie</td>
<td>x</td>
</tr>
<tr>
<td>A11772, pit</td>
<td>Cereal</td>
<td>Ua-21380 4575±55</td>
<td>3520-3090 Svenstorp/ Bellevuegård</td>
<td>-</td>
</tr>
<tr>
<td>A2210, posthole in house 12</td>
<td>Cereal</td>
<td>Ua-21329 4570±55</td>
<td>3510-3090 Svenstorp – MN A</td>
<td>-</td>
</tr>
<tr>
<td>A18958, burial by façade 3</td>
<td>Human bone</td>
<td>Ua-21333 4495±45</td>
<td>3360-3020 Svenstorp?</td>
<td>-</td>
</tr>
</tbody>
</table>
tained pottery that was not typologically identifiable
- in five pairs one pit contained only Oxie type pottery ($\Sigma = 5$) and the other only Svenstorp type pottery ($\Sigma = 5$)
- in one pair one pit ($\Sigma = 1$) contained only Svenstorp type pottery and the other pottery that was not typologically identifiable
- in two pairs, both pits ($\Sigma = 4$) contained only Svenstorp type pottery

Traditionally, there are two interpretations concerning the two types of pottery: (1) the two styles signify a possible dual organization during the Early Neolithic, although the Svenstorp type pottery may have been slightly later (Larsson 1984), and (2) both pottery styles were produced by the same group of people, but the Svenstorp type pottery was used in, and possibly produced for, ritual contexts (Koch 1998). The evidence from Almhov supports both interpretations: Svenstorp type pottery seems to have appeared later, c. 3700 cal. BC, and it was associated with burials to a larger extent than the Oxie type pottery (Table 1).

Moreover, there was a clear association between Oxie type pottery and remains of red deer at the site. Bones and antlers from red deer

Fig. 7. Map with pit pairs/pit clusters (black), hypothetical post pairs indicating huts or tents (red dots), façade structures with adjacent burials (blue), dolmens (dark grey) and other Early Neolithic or early Middle Neolithic features (light green).
occurred in 15 of the 34 pits with Oxie type pottery but only in one of the ten pits with Svenstorp type pottery.

The differences in backfill between the pits in each pair and cluster suggest a functional difference between the pits, one being used for refuse and the other for storage. The pits that were backfilled with the bulk of the waste indicate a spatial association with craft production, butchering, cooking and consumption. Based on identifiable rim sherds, these pits on average contained sherds from 20 pots. We interpret these as refuse pits. The pits with less waste contained on average sherds from 11 pots. Moreover, pots with wider rims, 21–36 centimetres across, were more frequent in these pits. The presence of fewer and larger pots and less waste indicates that these pits were used for storage and that they were backfilled at a later stage than the refuse pits, possibly just before the site was abandoned (Rudebeck 2010).

Posthole patterns

Traces of dwellings adjacent to the pits were not systematically searched for during the excavation. However, traces of a longhouse from the Early Neolithic II–Middle Neolithic A were found northeast of the pit concentration (Fig. 1; Table I) (Gidlöf et al. 2006). Of the roughly 1740 postholes that were documented at Almhov, some 1350 were excavated. Most of them belonged to longhouses from later periods (Gidlöf et al. 2006). During the post-exavcation analysis it was discovered that many of the unexcavated postholes appeared in pairs, usually 2–4 metres apart, and sometimes up to 6 metres apart. These hypothetical post pairs, in all about 30 pairs, were located on the periphery of the Early Neolithic activity area, often in proximity to the pit pairs and pit clusters (Fig. 7). Rudebeck (2010) has suggested that these postholes may have been traces of small huts or tents, connected to the pit pairs/clusters. Although it is not possible to verify this interpretation, there is evidence of ten similar posthole pairs at other Early Neolithic sites in the vicinity, and postholes in a pair at the nearby site Elinelund 2B have been dated to the Early–Middle Neolithic (Sarnäs & Nord Paulsson 2001).

Almhov and the flint mines at Södra Sallerup

Evidence from the flint mining site at Södra Sallerup, about 11 kilometres or one hour’s walk – northeast of Almhov, reveals various connections between the sites. The earliest flint mines are of the same date as the pits at Almhov, and five excavated posthole pairs adjacent to the mines have been interpreted as traces of huts or tents (Rudebeck 1987; Nielsen & Rudebeck 1991). The association between the sites is evident also from the fact that the majority of the roughly 40 pointed-butted axes from Almhov were made of Senonian flint of the same type as the mined flint. Moreover, blanks for pointed-butted axes were clearly produced in the mining area (Rudebeck 1994, 1998; Jansson 1999; Högberg 2006) and axes of the same type, and of the same type of flint, were also produced at Almhov (Gidlöf et al. 2006).

Dispersal patterns of animal bones in pit pairs and pit clusters

The animal bone assemblage dated to the Early Neolithic from Almhov amounts to some 41 kilos, making it the largest bone collection from the Early Neolithic in south Scandinavia (Rudebeck 2010). About one third of the mammal bones have not been possible to identify as to species and body parts. The 58 pits included in the 27 analysed pairs/clusters (cf. Figs. 4 & 6) contained about 30 kilos, 4760 fragments, of animal bones, thus constituting 73% of the animal bones from Early Neolithic features at the site. The animal bone distribu-
tion in the pit pairs/clusters has been studied in an attempt to discern possible differential
treatment of different species and different
body parts (Macheridis 2011b).

With the exception of K03, K23 and K25, all pit pairs/clusters contained bones that were
identified as to species in at least one of the pits, and the distribution of these showed some gen-
eral characteristics. The pair K15 and the cluster
K24 are excluded from the analysis because of
their unusual species representation, differing
from the average (Macheridis 2011b:34). Fig. 8
illustrates the distribution of the most abundant
species from the pits: cattle, red deer, pig and
sheep/goat (including loose teeth, horns and antlers). The following analysis focuses on these
species. Among cattle and sheep/goat cranial
fragments, especially loose teeth, dominate, due
to taphonomic factors. Therefore loose teeth
are excluded from the anatomical distribution
illustrated in fig. 9. Also a few fragments of
horn and red deer antler, making up some 35%
of the fragments and 50% of the weight of the
bones from this species, have been excluded,
since antler counts also included tools. With
this in mind, cranial fragments can still be con-
sidered a majority, together with long bones,
metapodials and phalanges. Cranial fragments
of cattle are the most abundant amongst the
identified specimens. Fragments from the rib
cage and the pelvic region and vertebrae are
largely underrepresented in all four species. The
underrepresentation of spongy elements is
most probably a consequence of taphonomic
destruction. Unfortunately, a more thorough
taphonomic analysis has only been partly done
elsewhere (Jonsson 2005; Macheridis 2011b).

Beside these overall characteristics, the distri-
bution of animal species and body parts (sim-
plified here to cranial/postcranial categories)
Table II. Pit pairs/clusters divided into groups, based on the distribution of bone from cattle, red deer, pig and sheep/goat, and body parts (n=941 fragments).

<table>
<thead>
<tr>
<th>Group</th>
<th>Characteristics</th>
<th>Cattle</th>
<th>Red deer</th>
<th>Sheep/goat</th>
<th>Pig</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>One bone-free pit.</td>
<td>Cranial fragments</td>
<td>In 3 pit pairs. Al-</td>
<td>In 5 pit pairs.</td>
<td>In 3 pit pairs. Never the only species.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>exclusively appear in 6 pit pairs.</td>
<td>ways together with domestic species, in one case with cattle only.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Both pits contained the same number of species.</td>
<td>In all 3 pit pairs, 4 pits. Cranial fragments appear exclusively in one of the pits in one pair twice.</td>
<td>In 2 pit pairs. Opposing cattle and once together with cattle. Only represented by antler or postcranial fragments.</td>
<td>In 2 pit pairs, once in both pits of a pair.</td>
<td>In 2 pit pairs. Never the only species.</td>
</tr>
<tr>
<td>C</td>
<td>One pit with one species, the other with three or more species.</td>
<td>The only species in two cases. Cranial and postcranial fragments.</td>
<td>In 2 pit pairs. Only represented by antler or postcranial fragments.</td>
<td>The only species in one pit.</td>
<td>In 2 pit pairs. Never the only species.</td>
</tr>
<tr>
<td>D</td>
<td>Both pits contained the same species, but in one of the pits one of the species was excluded.</td>
<td>Cranial fragments in all pits; exclusively in 5 pits (including antler and loose teeth).</td>
<td>In 4 pit pairs/ clusters. Most commonly the “excluded” species in one or more pits of a cluster.</td>
<td>In 5 pit pairs/clusters, in 7 pits. Never the only species.</td>
<td>In all pairs/clusters, in 7 pits. Never the only species.</td>
</tr>
</tbody>
</table>

in and between the pit pairs and pit clusters shows some general patterns. Based on species representation, the features can be divided into four groups (Table II). The most common distribution is pit pairs within which one pit contained all of the bones (group A). Group D is difficult to interpret, since the pattern seems to be more random, and is not discussed further.

The analysis shows that cattle bones were the most common. In pits with only one identified species, it was almost always cattle (Macheridis 2011b:32). That the bone-free pits often also lacked artefacts of flint and pottery implies a practice in which the way waste was managed reflects cultural behaviour (cf. Fig. 6). The filling of pits clearly followed a certain order concerning different types of waste, and animal bones were assessed according to the categorization of species and body parts (cf. Marciniak 2005, p. 216).

Apart from the pattern of one bone-free pit in the pairs (group A), the strongest pattern is the exclusive presence of cranial fragments (also including loose teeth) in many of the pits. This can be seen in group A, where the pit which contained bones almost always contained cranial fragments only. These scattered cranial bones were often very fragmented and few in each pit (Jonsson 2005). A possibility is that these fragments do not represent butchering waste, but swept-down fragments of skulls or crania on display adjacent to the pits, similar to the display of horned cattle skulls on Michelsberg sites in central Europe (Lichter & Weber 2010). That animal skulls had a special significance is supported by other features at Almhov. One example is one pit (A27048; Table I) which contained eleven juvenile pig mandibles (and no other bones), interpreted...
as a ritual deposition (Welinder et al. 2009, p. 149). Another example is the deposition of a red deer antler in a façade structure below one of the dolmens (Rudebeck 2010; Macheridis 2011a). Both skulls and antlers are regarded as particularly significant and powerful symbols in many cultures (e.g. Larsson 1988; Schulting 1996; Harrod 2000, pp. 113 ff.; Schulting & Richards 2001; Nilsson 2008, p. 88), strengthening these arguments. As mentioned above, a detailed taphonomic analysis with regard to the degree of e.g. weathering and gnawing is lacking. Such an analysis could test this hypothesis further, in terms of handling and exposure of the bones before deposition.

In a correspondence analysis of the distribution of animal species in 83 Early Neolithic pits at Almhov (not only pits in pairs and clusters), one pattern was that bones from red deer did not usually coexist with bones from domestic species (Welinder et al. 2009, p. 151). The differential distribution of cattle and red deer in the pits indicates a possible dualism in the categorization of these animals (cf. Welinder et al. 2009, p. 151; Marciniak 2005, p. 205). However, a closer look at the species distribution in the pit pairs/clusters does not fully reaffirm the conclusion. Red deer is the second most abundant species. When red deer bone did occur with bones of domestic species, it was always together with cattle bone. Therefore, it is problematic to assume a dualism without recognizing the possibility of a more complex categorization concerning large ungulate species (Macheridis 2011b:39; cf. James 1990). Historical evidence reveals that this may have been the case. In Ireland red deer had a special role during the Early Middle Ages. It was designated as ag allaid, i.e. wild cattle, which together with iconographical material show that this animal had a liminal status in the sense that it belonged to both the “wild” and the “domestic” sphere. This also meant that the animal had a social significance as it resembles cattle, which is tame, but was also seen as different, as it is a wild species (Soderbergh 2004, p. 168). Ethnographic examples tell of similar perceptions. Among the Ethiopian Konso, it was permitted
to eat deer, or rather horned animals, because 
they resembled cattle, sheep and goats (Hall-
pike 2008, p. 329). Hence, rather than pre-
supposing a mere wild–domestic dichotomy 
between red deer and cattle during the Early 
Neolithic, the evidence from Almhov indicates 
that the categorization of the species may have 
been more complex and possibly similar to the 
one's presented in the examples above.

Concluding remarks concerning 
pit patterns at Almhov

We interpret Almhov as a gathering and feasting 
site which was occupied by early farmers who 
were also exploring the local flint resources. 
During the gatherings each camping unit raised 
tents or huts and dug a couple of pits along 
the fringes of a roughly circular area. One pit 
was used for dumping waste from butchering, 
cooking and craft, while the other was used 
for storage. The camping units probably had 
animal skulls, preferably skulls of horned ani-
mals, on display adjacent to the pits, possibly 
signifying group identity, available resources, 
particular skills or other socially significant 
assets and abilities.

Discussion

Inspired by the discussion of structured depo-
sition and other related concepts initiated by 
Duncan Garrow (2012), we would like to reflect 
briefly on material culture patterning at Alm-
hov. The most evident pattern is that the bulk 
of the artefacts and bones had been deposited 
in one of the pits in each pair/cluster. The pits 
were probably backfilled by deliberate actions 
as well as by natural processes, overall result-
ing in a pattern with a high level of structure. 
However, although the actual filling-in of the 
pits may be regarded as evidence of “highly for-
malized, repetitive behaviour”, which, following 
191), is a characteristic of ritual activities, the 
argument here is that the “structured deposi-
tion” at Almhov did not derive from actions 
concerned with the filling-in of pits as a ritual 
practice, but from cultural norms of dwelling. 
On the other hand, to the extent that social 
gatherings and feasting per se may be consid-
ered as rituals, the site may be characterized as 
a ritual site. Rituals produce waste and things 
are used for practical purposes also in connection 
with rituals (Bradley 2005).

Hence, rather than trying to pinpoint sites, 
pits and depositions as either ritual or quo-
tidian, based on the level of structure among 
features and artefacts, it is important to assess 
possible reasons for the observed patterns in 
each case. Clearly, the pit pattern and the dif-
ferential distribution of artefacts and animal 
bones within the pits at Almhov should be seen 
as evidence of cultural norms at some level. 
It is unlikely that the intention was to create 
pits with rubbish and pits without rubbish 
as a ritualized practice. It may be argued that 
the different fillings of the pits were simply a 
result of the pits having had different functions. 
However, this does not exclude the normative 
significance of this difference, but only transfers 
it to the cultural norm of constructing pits with 
different functions as a proper way of dwelling.

Acknowledgement

Thanks to Åsa Berggren, Lars Larsson and Debo-
rah Olausson for valuable comments on pre-
vious versions of the manuscript.

References

Andersson, M. 2004. Making Place in the Landscape: 
Early and Middle Neolithic Societies in two west Scandi-
nian valleys. Lund.


Brink, K. 2009. Gårdarna på Almhov – Senneolitikum 
och Äldre Bronsålder kring Hyllie Mosse. In Hadevik,


