

OFFPRINT FROM RGZM – TAGUNGEN BAND 12

Sabine Gaudzinski-Windheuser · Olaf Jöris
Martina Sensburg · Martin Street · Elaine Turner (eds)

**SITE-INTERNAL SPATIAL ORGANIZATION
OF HUNTER-GATHERER SOCIETIES:
CASE STUDIES FROM THE EUROPEAN
PALAEOOLITHIC AND MESOLITHIC**

Papers submitted at the session (C58) »Come in ... and find out:
Opening a new door into the analysis of hunter-gatherer social
organisation and behaviour«, held at the 15th U.I.S.P.P. conference
in Lisbon, September 2006

Redaktion: Martina Sensburg, Bendorf; Martin Street, Elaine Turner, Reinhard Köster (RGZM)
Satz: Martina Sensburg, Bendorf
Umschlaggestaltung: Reinhard Köster (RGZM) unter Verwendung eines Plans von Gönnersdorf, S. 62 Abb.6a.

**Bibliografische Information
der Deutschen Nationalbibliothek**

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

ISBN 978-3-88467-190-0
ISSN 1862-4812

© 2011 Verlag des Römisch-Germanischen Zentralmuseums

Das Werk ist urheberrechtlich geschützt. Die dadurch begründeten Rechte, insbesondere die der Übersetzung, des Nachdrucks, der Entnahme von Abbildungen, der Funk- und Fernsehsendung, der Wiedergabe auf fotomechanischem (Fotokopie, Mikrokopie) oder ähnlichem Wege und der Speicherung in Datenverarbeitungsanlagen, Ton- und Bildträgern bleiben, auch bei nur auszugsweiser Verwertung, vorbehalten. Die Vergütungsansprüche des §54, Abs. 2, UrhG. werden durch die Verwertungsgesellschaft Wort wahrgenommen.

Druck: Strauss GmbH, Mörlenbach
Printed in Germany.

TWO HUT STRUCTURES FROM AN EARLY MESOLITHIC SITE AT ÅLYST (DENMARK)

A PRELIMINARY REPORT

Current Mesolithic research on the island of Bornholm reflects an increased focus on the investigation of Maglemose sites. Most of these are surface collections (Casati / Sørensen / Vennersdorf 2004, 113; Casati / Sørensen 2006a, 9ff; Nielsen 2001, 85ff; Sørensen 2004, 9ff). An exception to this is the large scale salvage excavation at the extensive early Mesolithic site of Ålyst which was conducted by the authors of this article together with the Museum of Bornholm between 1998 and 2005. The site is situated approximately seven kilometres north of Rønne on the shore of the Bagge Å and approximately one kilometre from the present day shoreline of the Baltic Sea (fig. 1; Casati / Sørensen 2006b, 241ff).

During this period approximately 10 000m² (fig. 2) were excavated by systematic dry sieving (meshes of 3mm) of the stratigraphic layers in units of 1 m². Some areas of specific interest were excavated, employing a system of ¼ m². Throughout the excavation area several types of structural features were recognized, such as hearth-pits, storage pits and postholes, as well as a large number of lithic artefacts, charcoal and other burnt organic remains such as bones and carbonised hazelnut shells. Unfortunately, the preservation of unburnt organic material was unfavourable as the site is situated on a Late Glacial shoreline deposit, i. e. on sandy soil (Brinch Petersen 1973, 95; Nielsen 2001, 89).

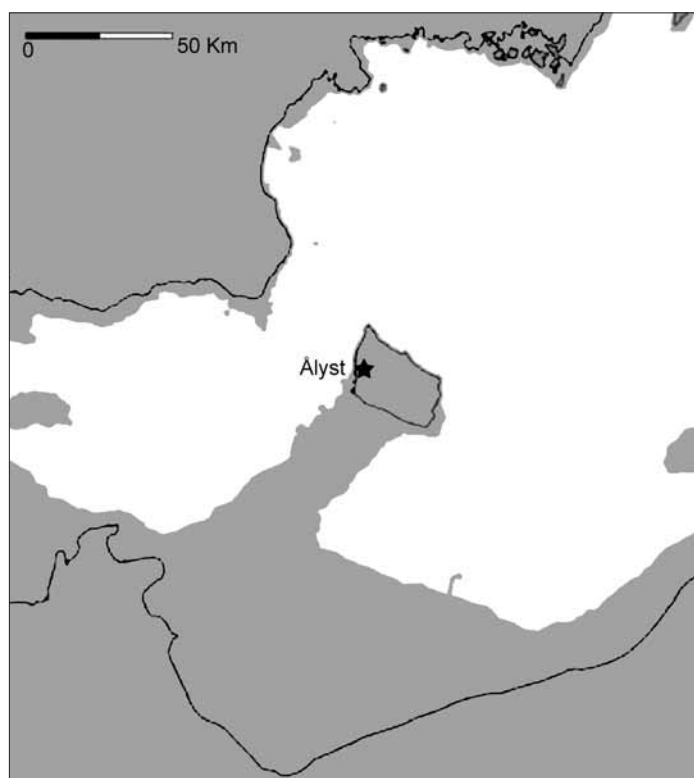


Fig. 1 Bornholm in the south-western part of the Baltic Sea at around 8000 cal. BC, depicted when it was still a peninsula (grey = land at 8000 cal. BC; black line = present-day coastline). – (Graphic: C. Casati / A. Pihl / L. Sørensen).



Fig. 2 Aerial photo of the site taken in the summer of 2003, looking towards the south. – (Photo: M. Vennersdorf).

The excavated artefacts were distributed in spatially distinct clusters, of which 26 could be identified so far. These units vary in size from approximately 9 to 35 m². Only a few of the clusters seem to overlap (**fig. 3**). An extensive radiocarbon dating programme is currently under way, but the lithic artefacts seem to point towards an interpretation of the site as a place which has seen several recurrent visits of hunter-gatherers during the early phases of the Boreal period. There are some indications of an occupation phase in the late Preboreal, but this remains speculative until the results of the radiocarbon dating programme are known. On the whole, the units are all similar in lithic production which has taken place at the site. The lithic remains at the site provide us with a picture of a group of hunter-gatherers who primarily produced blanks for systematic microlith production.

The lack of tool diversity in the units could be an indication of a short-term settlement strategy. This is the main reason for our current interpretation of the site as a transit camp, which has been occupied for only short periods of time on a regular basis. Unfortunately, due to poor organic preservation it was neither possible to determine whether the site was occupied during the same season throughout the whole Early Mesolithic, nor can we determine whether it always served the same function within the settlement system. There are indications that the flint concentrations represent seasonal settlements related to the annual upstream migration of trout from October to November in order to spawn (Jespersen 2004). At this time local sources of hazelnuts are also ripe and ready to be eaten. The numerous burnt hazelnut shells found in the flint concentrations add weight to the interpretation of seasonal activities in the late fall. Another

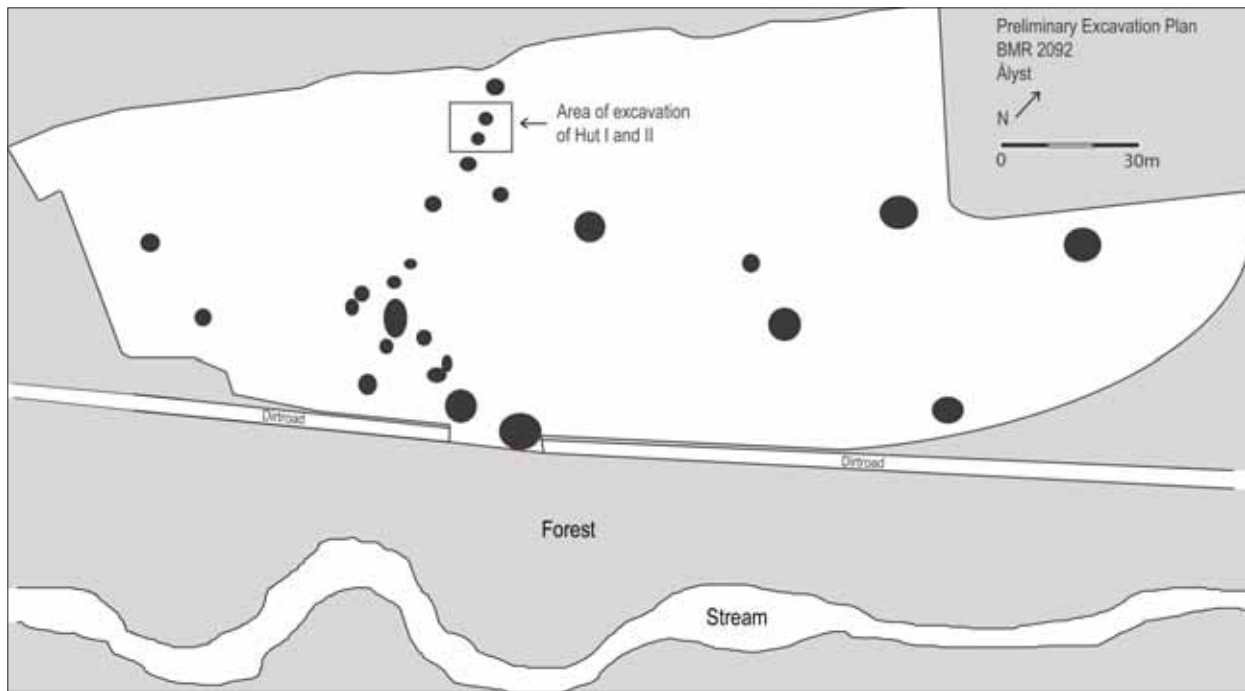


Fig. 3 A preliminary excavation plan of the site. The flint concentrations are indicated by the black dots. – {Graphic: C. Casati}.

motive for a recurrent settlement pattern at this particular spot could very well be the many topographic advantages for hunting. All things considered, this is an ideal landscape for hunting, fishing and gathering. However, as revealed during excavation in 2002, some of the units in the northern part of the excavation area show differences in regard to the typological as well as to the raw material composition of the lithic material (**tab. 1**). Furthermore, certain visible constructions were discovered during the course of excavation. Together, this led to our recognition of these units as the remains of two hut constructions with adjacent activity areas (**fig. 4**).

Lithic Assemblage in:	
<i>General Clusters</i>	<i>Huts I & II</i>
Cores	Cores
Flakes	Flakes
Blades	Blades
Microburins	Microburins
Microliths	Microliths
Hammer Stones	Splintered Pieces
	Knives
	Burins
	Scrapers
	Core Axes
	Ground Stone Axes
	Hammer Stones
	Anvil Stones
	Grinding Stones
	Flint Depot

Tab. 1 A schematic overview of the lithic assemblage at the site of Ålyst. It shows a lack of tool diversity in the clusters, in comparison to tool diversity in Huts I and II. – (Table: C. Casati).

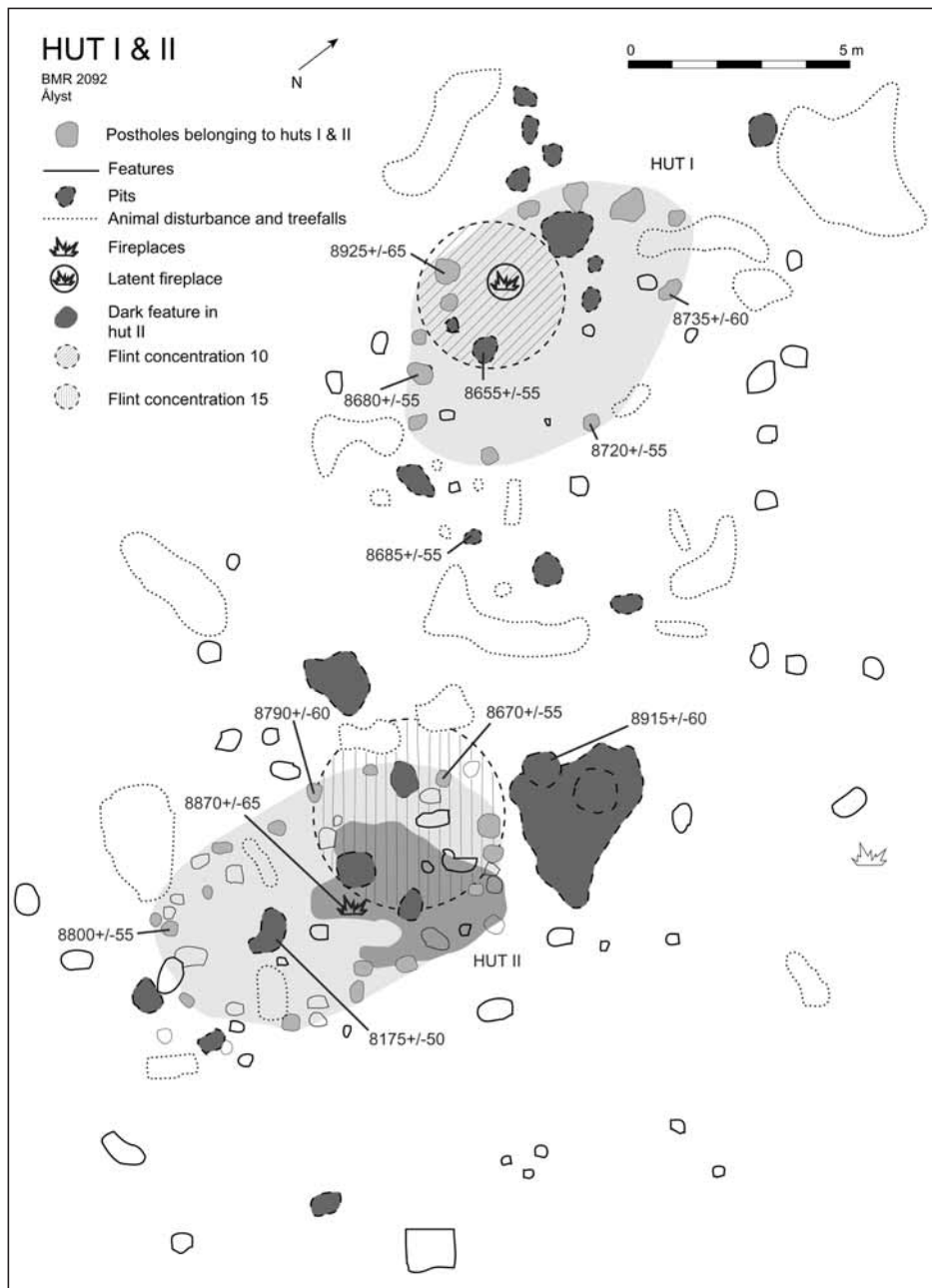


Fig. 4 Excavation plan of Hut I and II with features and natural disturbances. – (Graphic: C. Casati / L. Sørensen).

Hut I

Hut I, which was excavated partly in units of full square metres and partly in quarters of square metres, was orientated north-south and measured roughly 7×4 m with a possible entrance area towards the East. The interpretation of the position of the entrance is substantiated by the lack of postholes and the absence of lithics just outside the entrance. The twelve postholes constituting the hut's structural remains had the same morphology. They were diffuse features, dark brown or grey in colour, with a diameter and depth of

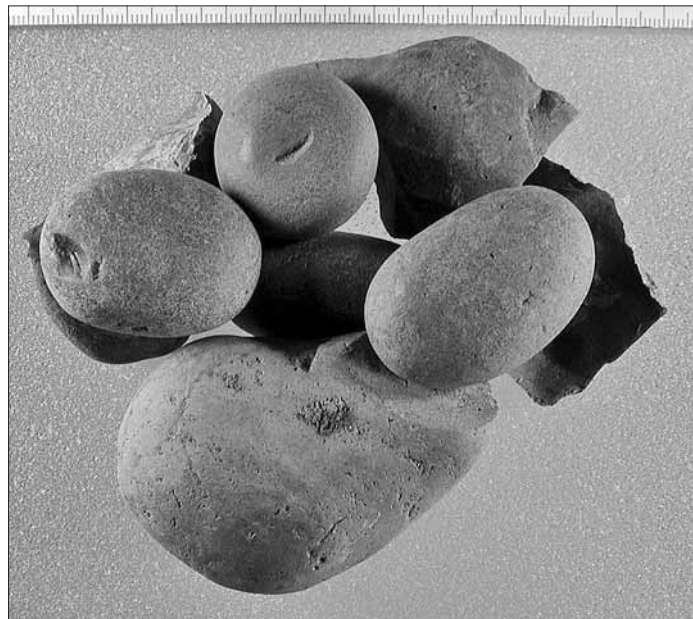


Fig. 5 The nodular flint depot recovered in feature A106 in Hut I. – (Photo: C. Casati).

20-30 cm. Furthermore, traces of preparation of holes for the posts could be observed in the postholes. Similar, poorly-defined, features have previously been observed e.g. at Svanemosen 28 (Grøn 1995, 75), Storlyckan (Larsson 2003, 29ff) and Årup (Karsten / Nilsson 2006, 8ff; Nilsson / Hanlon 2006, 57ff). Wooden stakes with dimensions that correspond to these features are known from Mesolithic hut structures at e.g. Ulkestrup Lyng I and II, (Andersen / Jørgensen / Richter 1982, 14ff) and Nivå 10 (Jensen 2001, 121). The fills of the postholes at Ålyst revealed traces of human activity as they contained finds such as lithic material, burnt hazelnut shells, small fragments of charcoal, hammer stones, anvil stones and grinding stones and, in one of the features (A 106), a small depot of nodular flint (Kugleflint) (**fig. 5**). This flint depot was a crucial find for the relative interpretation of the structure. A similar but larger flint depot was found on Bornholm during excavation of the Mesolithic site of Nørre Sandegård V. During excavation of the depot, Becker noticed that the flints were placed in a diffuse greyish feature (Becker 1952, 111). These finds are arguably Mesolithic, since the local nodular flint raw material is generally attributed to the Mesolithic on Bornholm while, during other periods of prehistory, the inhabitants primarily used imported flint. The appearance of this particular feature thus provided a guideline towards the morphology of the Mesolithic features observed during our excavations. Furthermore, this interpretation is supported by the first AMS radiocarbon dates from the site. Our dating strategy is based on the dating of single charred hazelnut shells. A charred hazelnut shell from feature A 106 containing the flint depot is dated to 8925 ± 65 BP (AAR-9876), corresponding to 8280-7910 cal. BC (OxCal 3.10). The distribution of other dates, obtained from two pits and three postholes in Hut I, shows that they are most likely contemporaneous (**fig. 6**).

A generally accepted method to locate the positions of former hearths on a Mesolithic site is by plotting burnt artefacts and organic remains, assuming that the squares with the highest density coincide with the centre of such hearths (Cziesla 1990, 3ff). There was no evident hearth in Hut I, but by plotting the burnt lithic material, pieces of charcoal and charred hazelnut shells, a latent hearth could be postulated in the north-western part of the hut. In this part of the hut, we uncovered some 2050 flints in an area of approximately 16 m². The concentration contained debitage and different tool types such as microliths together

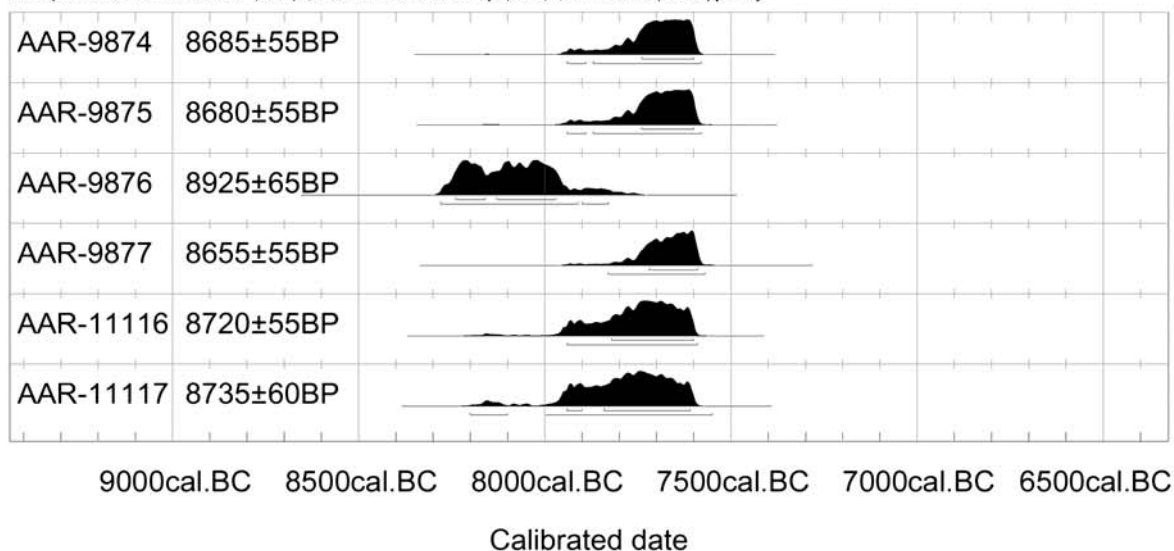


Fig. 6 The ^{14}C dates obtained from Hut I. – (Graphic: C. Casati).

with knives, scrapers, burins and greenstone axes (**fig. 7**). The distribution of the larger artefacts such as hammer stones, anvil stones and cores indicates the presence of a barrier creating a wall effect, which corresponds to the alignment of the postholes. The southern part of the hut was almost devoid of finds. Within the structure were some small, light brown or greyish to black pits, approximately 30-40 cm in diameter and depth. These contained charred hazelnut shells, burnt bones and lithic artefacts. The lithics date the pits typologically to the Maglemose Culture. Larger pits, approximately one to two metres wide and 40-50 cm in depth, were revealed outside the hut. These pits are likely to have been in use at the same time as the hut. A refit of a scraper and a flake from two different features in Hut I already indicates the contemporaneity of these particular features, but future refitting analyses between lithics found inside the hut and those recovered from pits outside the hut, in addition to the results of AMS-radiocarbon dating currently being processed, will test this hypothesis.

Hut II

We excavated another hut structure some 6 metres southeast of Hut I (**fig. 4**). Hut II was oval in form and, due to various circumstances, was excavated in full square metre units. It was oriented North-South and measured 7×4 m with a darker coloured area of approximately 2×2 m towards the East. This darker coloured area, which was slightly deeper, contained fragmented lithic material as well as small pieces of charcoal and burnt hazelnut shells. It is interpreted as the entrance area. The 16 postholes were less distinct than those in Hut I, and were all similar in appearance. They were dark and light brown in colour, with diameters of approximately 20-30 cm and depths of 10-30 cm. The southern part of the structure was not as well preserved as the northern part. The fill of the postholes contained the same materials as those in Hut I, i.e. charcoal, burnt hazelnuts and lithics, although some of the postholes contained larger stones,

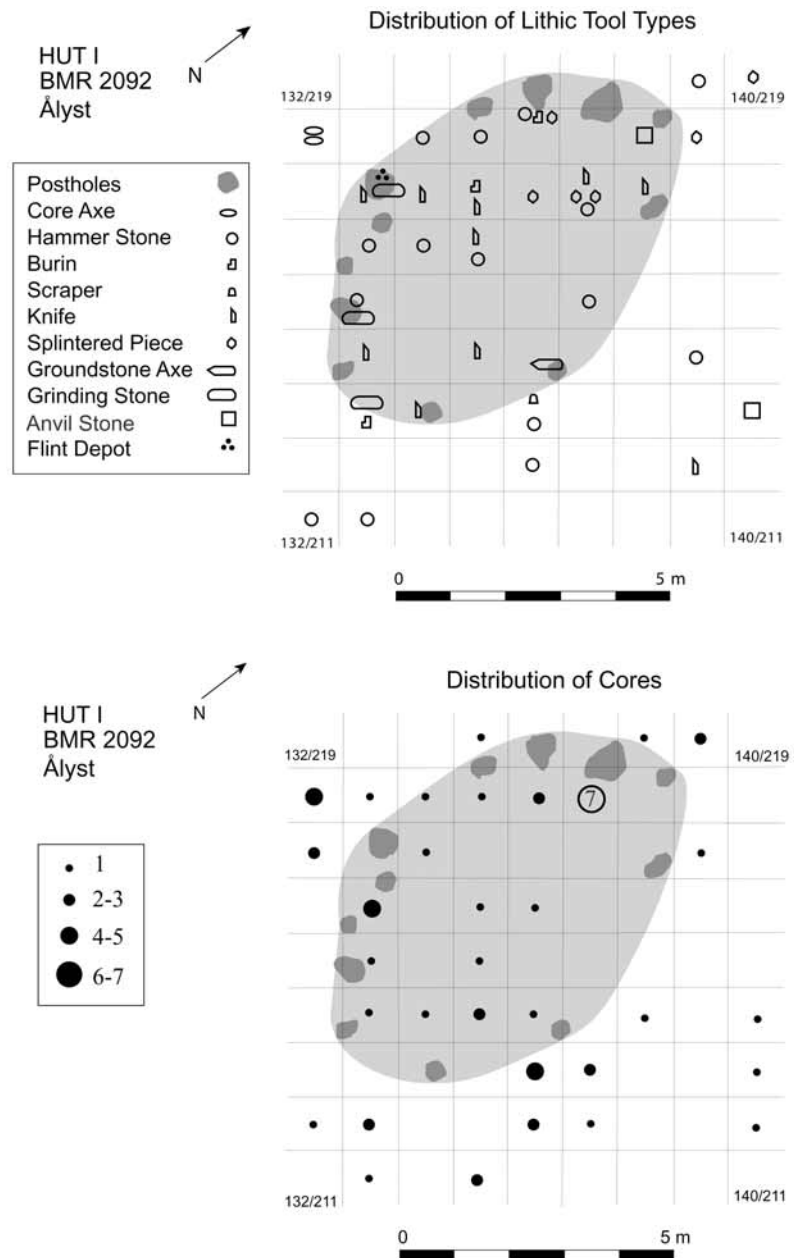


Fig. 7 The distribution of tools and cores in Hut I. – (Graphic: C. Casati / C. Lindberg / L. Sørensen).

which have been interpreted as packing. Inside the hut was a large concentration of flint, (approximately 20m² in size and comprising 1 000 pieces of flint), with various lithic tool types. The tool assemblage comprised a variety of finds, such as microliths, knives, scrapers, splintered pieces and burins. The lithics and tools were concentrated in the northern part of the hut, although some lithics were recovered outside the hut. This distribution pattern was in part disturbed by a large pit and by two tree fall features, which were first recognisable after most of the Maglemose layer had been excavated. These features contained a large amount of lithic material, which meant it was impossible to ascertain the true extent of the flint concentration. The southern part of the hut was almost devoid of finds and, as in Hut I, might be interpreted as

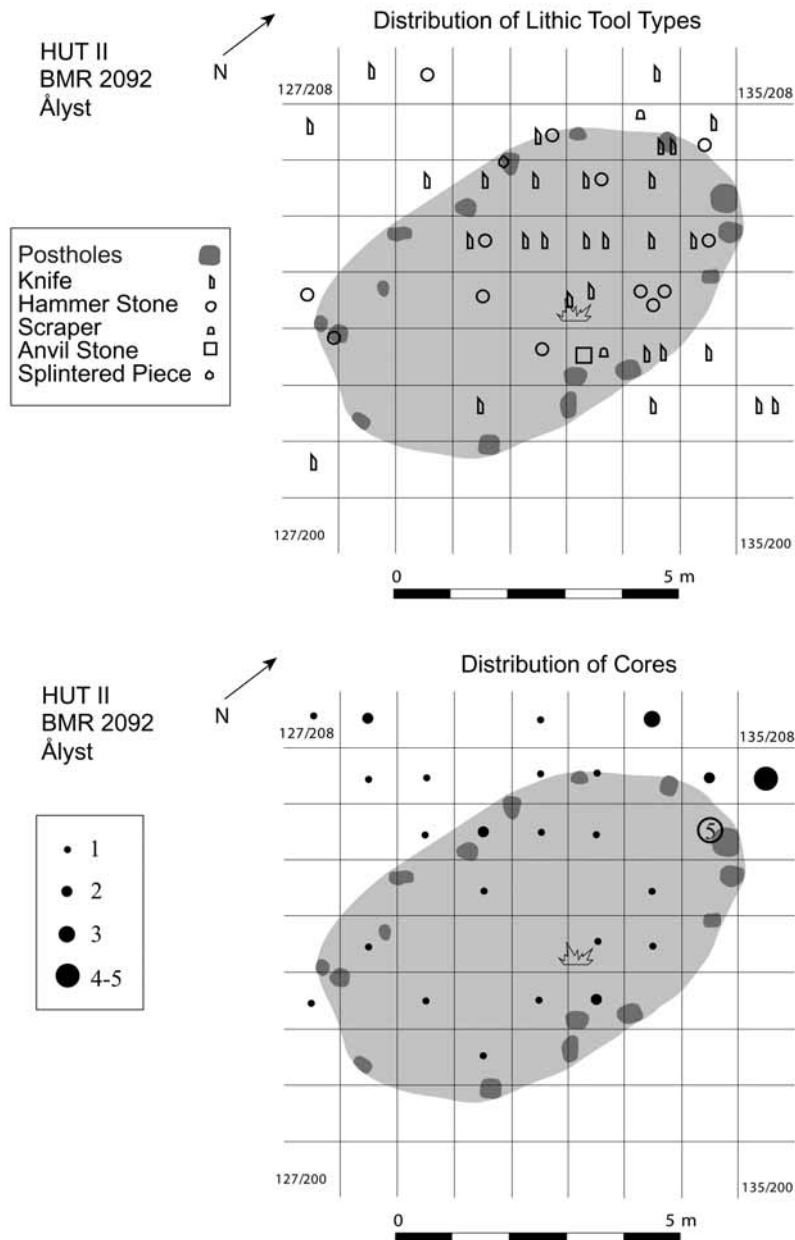


Fig. 8 The distribution of tools and cores in Hut II. – (Graphic: C. Casati / C. Lindberg / L. Sørensen).

a cleared area where the inhabitants slept. The distribution of the larger objects such as hammer stones, anvil stones and flint cores again indicates a barrier / wall effect, following the outlines of the hut wall defined by the postholes (**fig. 8**).

At the centre of the hut a visible hearth structure (feature A270) was revealed (**fig. 9**). It consisted of 20 fire-cracked stones located in a compact stone layer. The fill was dark brown at the centre but black and sooty at the edges. In the lower level of the stone packing were found a hammer stone, a lanceolate with lateral retouch, burnt flint and charred hazelnut shells. A red sandy layer which was exposed at the bottom of the hearth had probably been produced by the intense heat of the fire. This hearth had a different appearance from the pits and hearths found in the Bronze Age layer, which are deeper, larger and com-

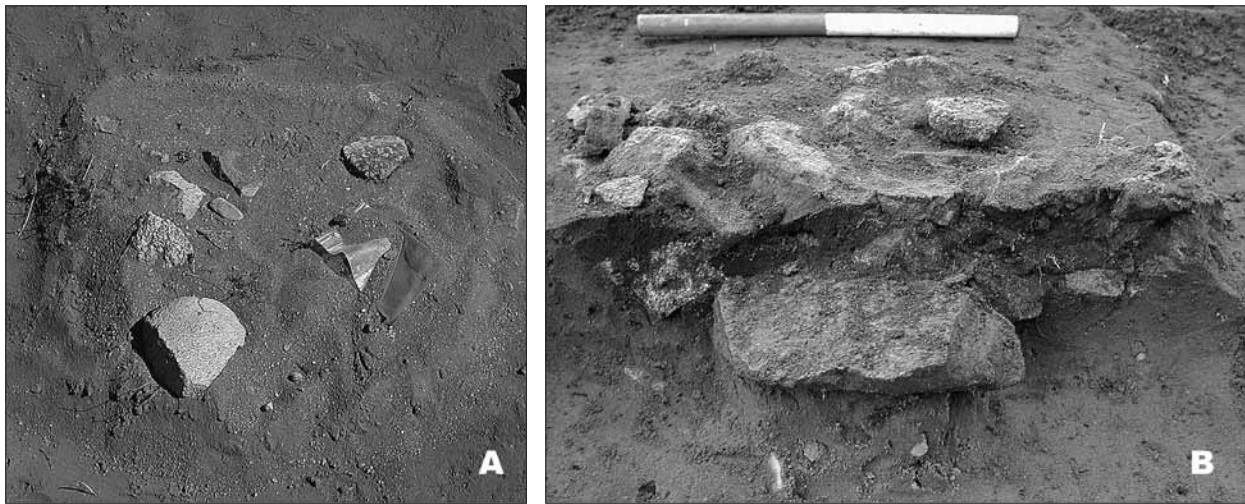


Fig. 9 The evident hearth in Hut II. – **A** surface view; – **B** section through the feature. – (Photo C. Casati).

prise larger fire cracked stones, together with dumps of ceramics. The Bronze Age fireplaces also occupy a higher stratigraphic position and their fire-cracked stones are often positioned in a circle. The hearth in Hut II was thus presumed to be of Maglemose age. An AMS radiocarbon sample from the hearth supports this assumption with a date of 8870 ± 65 BP (AAR-9881), corresponding to 8240-7780 cal. BC (OxCal 3.10). Five small pits found in Hut II were quite uniform and had a dark to light grey fill. They could be typologically dated to the Maglemose Culture by their contents, which comprised lithic material, charcoal, burnt hazelnut shells and some fire-cracked stones. Three of the pits were located around hearth A270. These pits were possibly associated with the preparation of food at the hearth. They could also be interpreted as the remains of former fireplaces in the hut, which were subsequently reused as pits. Outside Hut II were some larger pits, roughly 1-2 m wide and 40-50 cm in depth, with a dark to light greyish filling. These pits could also be typologically dated, as they contained lithics from the Maglemose Culture. Furthermore, we found burnt hazelnut shells, burnt bones and fire-cracked stones in the pits. At present, we cannot determine if these pits are contemporary with the occupation of the hut. It is possible that they reflect several different habitations in the area, thus disturbing the original remains of activity zones in the hut and its dumping areas.

The remaining dates from this hut (**fig. 10**) are not as conclusive as the dates obtained from Hut I. Unfortunately, a »wigggle« on the calibration curve at this period in time (approx. 8200-7700 cal. BC, OxCal v3.10; Bronk Ramsey 1995, 2001) leads to some uncertainty in the calibration. Four of the dates are in the same probable range as the date obtained from the fireplace, but sample AAR-9880, dating to 8175 ± 50 BP, cannot be contemporaneous with the hut. It is possible that there is a connection between this feature and the artefact cluster situated to the south of Hut II (**fig. 3**). The microlith inventory of this cluster is of Sværdborg type and is chronologically younger than the lithic inventory from Hut II. Future AMS radiocarbon dates, as well as systematic refitting analyses of the lithics and the fire-cracked stones, should clarify the relationships between the postholes, pits, fireplaces and presumed structures inside and outside the hut.

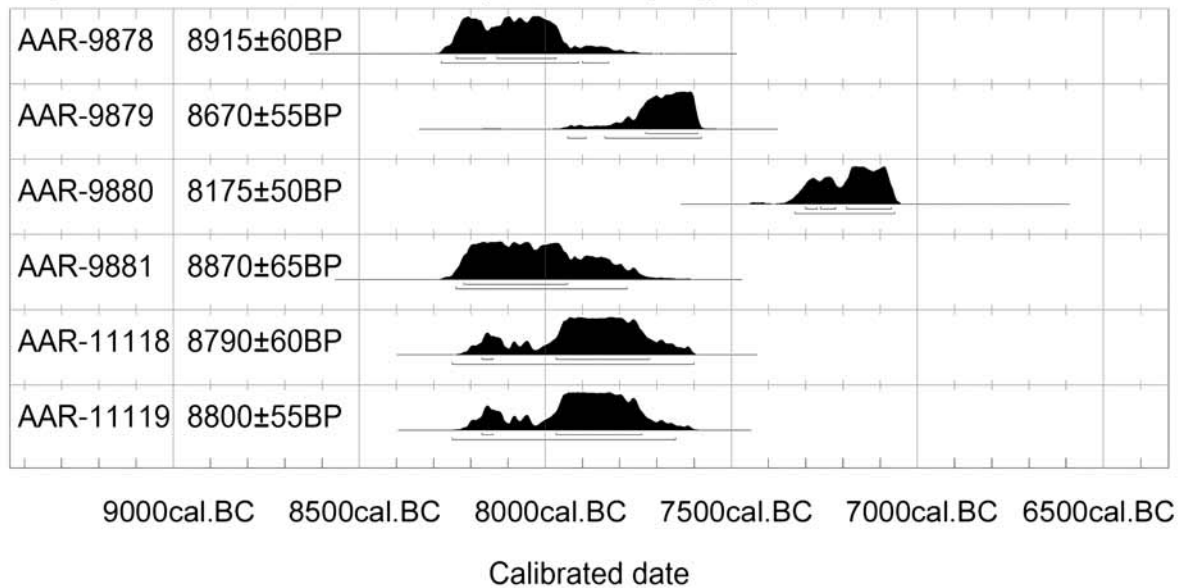


Fig. 10 The ¹⁴C dates obtained from Hut II. – (Graphic: C. Casati).

Comparison

The two huts show remarkable similarities in their orientation, size, entrance area, fireplaces and pits, as well as in the combination of lithic tool types. Knives, a few scrapers and several hammer- and anvil stones dominate the assemblages from both huts. However, differences are seen with respect to the microliths. Both lanceolates with lateral retouch and triangular microliths dominate in Hut I, while the microlith inventory of Hut II was confined to the former type. This raises the question as to the flint concentrations in the two huts: are they contemporary with the hut structures? To test this hypothesis, it is necessary to undertake extensive refitting analyses between finds from the flint concentrations, the postholes and the pits both inside and outside the huts.

As the colour of the postholes in the two huts varies, we initially interpreted the huts to be diachronic, but in light of the available radiocarbon dates we have to acknowledge the possibility that the huts were indeed contemporaneous. Future analysis is required to shed light on this topic. It may also be noticed that the character of the hearths in the huts varies from a latent fireplace in Hut I, identified by concentrations of burnt flint and hazelnut shells, to an evident fireplace in Hut II. In both huts, the small pits in the interior were all concentrated around the hearth. This could indicate an area where food was prepared.

Artefact typology clearly indicates that a broad spectrum of activities took place inside the two huts, whereas in the other concentrations on the site, the main products were blades for microlith production, (**tab. 1**). Apart from this, a most interesting observation concerning these two huts is that both structures appear to have had a main activity zone in their northern part, whereas the southern part is devoid of finds. This could indicate a sleeping area for one to two families. Most previously published huts from the Maglemose period are based on studies of lithic material and subsequent observations of presumed structures, but they have rarely been combined with specific structures such as postholes. The excavation method applied at Ålyst and the state of preservation at the site make it possible to combine postholes, flint concentrations,

putative structures and pits in an interpretation in which various areas can be recognized as parts of the hut structures, even though they are lacking finds.

But is the picture we see at Ålyst unique for Bornholm? There are strong indications that this is not the case. At a site called Årup in eastern Scania, southern Sweden, a hut structure similar to the ones at Ålyst was excavated in 2003 (Karsten / Nilsson 2006, 8ff; Nilsson / Hanlon 2006, 57ff). At the time of excavation, the excavators did not know of the structures at Ålyst. The structure at Årup shows a remarkable similarity to the ones at Ålyst in orientation, dimensions and so forth. A collaborative comparative analysis is planned for the near future.

Conclusion

Without the results of extensive refitting, microwear analysis and AMS-radiocarbon dates, a reliable interpretation of intra-site variability and spatial patterning remains difficult. However, it is beyond doubt that different factors, such as the range of activities performed, group size, duration of occupation and frequency of reuse of the individual artefact loci, will have played a role in the formation of the site. Group size and duration of occupation, in particular, have a definite effect on the size and artefact density of the units. It can be presupposed that artefact density and size will increase as the number of inhabitants and / or the length of time a place is occupied increase. However, an increase in density could be a sign of several repeated occupations at the same place. Future refitting analysis combined with the results of AMS-radiocarbon dating will hopefully indicate whether the concentrations are chronologically contemporary or represent different, diachronic occupations.

Furthermore, we expect that the smallest artefact units excavated, i.e. small scatters of charred hazelnut shells and/or bone fragments, as well as the scattered lithics recovered between the different concentrations, must be interpreted as the diffuse remains of peripheral activities.

All of this indicates that Ålyst, as a settlement, must be interpreted as a complicated diachronic amalgamation, with a combination of a short-term and a more long-term settlement strategy representing different types of functions. At the present stage of the analysis the Ålyst site can best be regarded as a location extensively reoccupied during the early Mesolithic, probably by small groups of hunter-gatherers.

References

- Andersen / Jørgensen / Richter 1982: K. Andersen / S. Jørgensen / J. Richter, *Maglelose hytterne ved Ulkestrup Lyng*. Nordiske Fortidsminder, vol. 7. Det Kongelige Nordiske Oldskriftselskab (Copenhagen 1982).
- Becker 1952: C. J. Becker, *Maglelosekultur på Bornholm*. Aarbøger for nordisk Oldkyndighed og Historie 1951. Det Kongelige Nordiske Oldskriftselskab (Copenhagen 1952) 96-177.
- Brinch Petersen 1973: E. Brinch Petersen, *A Survey of the Late Paleolithic and the Mesolithic of Denmark*. In: S. K. Kozłowski (ed.), *The Mesolithic in Europe* (Warszawa 1973) 77-127.
- Bronk Ramsey 1995: C. Bronk Ramsey, *Radiocarbon Calibration and Analysis of Stratigraphy: The OxCal Programme*. Radiocarbon 37(2), 1995, 425-430.
- 2001: C. Bronk Ramsey, *Development of the Radiocarbon Programme OxCal*. Radiocarbon 43 (2A), 2001, 355-363.
- 2005: C. Bronk Ramsey, *OxCal Program v3.10*. <http://www.rlaha.ox.ac.uk/oxcal/oxcal.htm>.
- Casati / Sørensen / Vennersdorf 2004: C. Casati / L. Sørensen / M. Vennersdorf, *Current research of the Early Mesolithic on Bornholm, Denmark*. In: T. Terberger / B. V. Eriksen (eds), *Hun-*

- ters in a changing world. *Environment and Archaeology of the Pleistocene-Holocene Transition (ca. 11 000-9 000 B.C.) in Northern Central Europe (Rahden/Westfalen 2004)* 113-132.
- 2006a: C. Casati / L. Sørensen, Bornholm i ældre stenalder – Status over kulturel udvikling og kontakter. *Kuml 2006*, 9-58.
- 2006b: C. Casati / L. Sørensen, Ålyst – et bopladskompleks fra Maglemosekulturen på Bornholm. Foreløbige resultater baseret på ukonventionelle udgravningsmetoder. In B. V. Eriksen (ed.), *Stenalderstudier. Tidligt mesolitiske jægere og samlere i Sydskandinavien*. *Jysk Arkæologisk Selskabs Skrifter 55 (Aarhus 2006)* 241-276.
- Cziesla 1990: E. Cziesla, Siedlungsdynamik auf Steinzeitlichen Fundplätzen. *Methodische Aspekte zur Analyse latenter Strukturen*. *Studies in Modern Archaeology 2 (Bonn 1990)*.
- Grøn 1995: O. Grøn, The Maglemose Culture. The reconstruction of the social organisation of a Mesolithic culture in Northern Europe. *BAR Int. Ser. 616 (Oxford 1995)*.
- Jensen 2001: O. Lass Jensen, Kongemose- og Ertebøllekultur ved den fossile Nivåfjord. In O. Lass Jensen / S. A. Sørensen / K. Møller Hansen (eds), *Danmarks Jægerstenalder – status og perspektiver*. Hørsholm Egnsmuseum (Hørsholm 2001) 115-129.
- Jespersen 2004: H. Jespersen, Ørreder i de bornholmske vandløb. *Bornholms Regionskommune. Natur & Miljø (Allinge 2004)*.
- Karsten / Nilsson 2006: P. Karsten / B. Nilsson (eds), In the Wake of a Woman. Stone Age pioneering of North-eastern Scania, Sweden, 10.000-5.000 BC, The Årup Settlements. *Riksantikvarieämbetet, Arkæologiska undersökningar, Skrifter No 63 (Lund 2006)*.
- Larsson 2003: M. Larsson, Storlyckan. Investigations of an Early Mesolithic Settlement Site in Östergötland, Eastern Middle Sweden. In: L. Larsson / H. Kindgren / K. Knutsson, D. Loeffler / A. Åkerlund (eds), *Mesolithic on the Move. Papers presented at the Sixth International Conference on the Mesolithic in Europe, Stockholm 2000 (Oxford 2003)* 29-36.
- Nielsen 2001: F. O. S. Nielsen, Nyt om Maglemosekultur på Bornholm. In: O. Lass Jensen / S. A. Sørensen / K. Møller Hansen (eds), *Danmarks Jægerstenalder – status og perspektiver*. Hørsholm Egnsmuseum (Hørsholm 2001) 85-99.
- Nilsson / Hanlon 2006: B. Nilsson / C. Hanlon, Life and work during 5000 years. In: P. Karsten / B. Nilsson (eds), *In the Wake of a Woman. Stone Age pioneering of North-eastern Scania, Sweden, 10.000-5.000 BC, The Årup Settlements*. *Riksantikvarieämbetet, Arkæologiska undersökningar, Skrifter No 63 (Lund 2006)* 57-178.
- Reimer et al. 2004: P. J. Reimer / M. G. L. Baille / E. Bard / A. Bayliss / J. W. Beck / C. J. H. Bertrand / P. G. Blackwell / C. E. Buck / G. S. Burr / K. B. Cutler / P. E. Damon / R. L. Edwards / R. G. Fairbanks / M. Friedrich / T. P. Guilderson / A. G. Hogg / K. A. Hugen / B. Kromer / G. McCormac / S. Manning / C. Bronk Ramsey / R. W. Reimer / S. Remmele / J. R. Southon / M. Stuiver / S. Talamo / F. W. Taylor / J. van der Plicht / C. E. Weyhenmeyer, *IntCal04 Terrestrial Radiocarbon Age Calibration, 0-26 Cal Kyr BP*. *Radiocarbon 46(3), 2004*, 1029-1058.
- Sørensen 2004: L. Sørensen, Coastal Research Potential in the Early Mesolithic on Bornholm. In: A. Beck / H. N. Frederiksen / L. Harvig / C. Juel / K. Langsted / T. Rasmussen / G. B. Ravnholt (eds), *Kontaktstencil 44*. University of Copenhagen (Copenhagen 2004) 9-26.

Abstract

Two hut structures from an early Mesolithic site at Ålyst, (Denmark) – A preliminary report

In the period from 1998 - 2005 the Museum of Bornholm undertook a large scale rescue excavation campaign at the Maglemose settlement complex at Ålyst. The investigations revealed a settlement complex with at least 26 flint concentrations and two hut structures from the Early Mesolithic. The two hut structures and adjacent activity areas are presented along with recently obtained ¹⁴C dates. The lithic artefacts from the huts show a high degree of tool diversity when compared with the lithic artefacts from the other units at the site, and the two hut structures seem to represent another aspect of the internal settlement pattern of the site. Most of the other units have been interpreted, on the basis of their lithic remains, as short term transit, hunting and fishing camps, whereas the huts indicate a more long term settlement strategy. It is argued that the Mesolithic habitation and activity area on Ålyst, and in general, seems to be much more varied than expected, containing a complex of several smaller and larger settlements.

Keywords

Bornholm / Ålyst / Early Mesolithic / Maglemose Culture / Mesolithic Huts / Site Diversity

CONTENTS

<i>Sabine Gaudzinski-Windheuser · Olaf Jöris · Martina Sensburg · Martin Street · Elaine Turner</i> Foreword	1
<i>Philip R. Nigst · Walpurga Antl-Weiser</i> Intrasite spatial organization of Grub/Kranawetberg: Methodology and interpretations. Insights into the spatial organization of Gravettian sites in Eastern Central Europe	11
<i>Pablo Arias · Roberto Ontañón · Esteban Álvarez-Fernández · Marián Cueto · Mikel Elorza Cristina García-Moncó · Alexandra Güth · María-José Iriarte · Luis C. Teira · Débora Zurro</i> Magdalenian floors in the Lower Gallery of La Garma. A preliminary report	31
<i>Olaf Jöris · Martin Street · Elaine Turner</i> Spatial analysis at the Magdalenian site of Gönnersdorf (Central Rhineland, Germany). An introduction	53
<i>Martina Sensburg</i> The relation between time and space in Gönnersdorf K-II	81
<i>Frank Moseler</i> Spatial analysis of Concentration K-IV of the Magdalenian site of Gönnersdorf	103
<i>Sabine Gaudzinski-Windheuser</i> An introduction to living structures and the history of occupation at the Late Upper Palaeolithic site of Oelknitz (Thuringia, Germany)	127
<i>Stefan Wenzel</i> The Magdalenian dwelling of Orp East (Belgium) and its spatial organization	141
<i>Frank Gelhausen</i> Subsistence strategies and settlement systems at the <i>Federmessergruppen</i> site of Niederbieber (Central Rhineland, Germany)	159
<i>Claudio Casati · Lasse Sørensen</i> Two hut structures from an Early Mesolithic site at Ålyst (Denmark). A preliminary report	175
<i>Daniela Holst</i> Spatial organization and settlement dynamics of Mesolithic nut processing sites in the Duvensee bog (Northern Germany)	187
<i>Jorge Martínez-Moreno · Rafael Mora Torcal</i> Spatial organization at Font del Ros, a Mesolithic settlement in the South-Eastern Pyrenees	213

<i>Lars Larsson · Arne Sjöström</i>	
Hut and house structures in the Mesolithic of Southern Scandinavia	233
<i>Ole Grøn</i>	
A 7 000 year old Mesolithic dwelling with a brush floor excavated under water.	
A window into behavioural organization of hunter-gatherer dwellings	249
<i>Dani Nadel · Ehud Weiss · Hartmut Tschauner</i>	
Gender-specific division of indoor space during the Upper Palaeolithic?	
A brush hut floor as a case study	263
List of contributors	275

LIST OF CONTRIBUTORS

- Esteban Álvarez Fernández**
Edificio Interfacultativo de la
Universidad de Cantabria
Instituto Internacional de Investigacio-
nes Prehistóricas de Cantabria
Avda. de los Castros, s/n
E - 39005 Santander
esteban.alvarez@unican.es
- Walpurga Antl-Weiser**
Naturhistorisches Museum Wien
Prähistorische Abteilung
Burgring 7
A - 1014 Wien
walpurga.antl@nhm-wien.ac.at
- Pablo Arias**
Edificio Interfacultativo de la
Universidad de Cantabria
Instituto Internacional de Investigacio-
nes Prehistóricas de Cantabria
Avda. de los Castros, s/n
E - 39005 Santander
pablo.arias@unican.es
- Claudio Casati**
Københavns Universitet
Saxo-Instituttet
and Frederiksbundstvej 150, 1th
DK - 2700 Brønshøj
claudio@casati.dk
- Marián Cueto**
Edificio Interfacultativo de la
Universidad de Cantabria
Instituto Internacional de Investigacio-
nes Prehistóricas de Cantabria
Avda. de los Castros, s/n
E - 39005 Santander
mariancueto@hotmail.com
- Mikelo Elorza**
Sociedad de Ciencias Aranzadi
Alto de Zorroaga 11
E - 20014 San Sebastián
concholis@yahoo.com
- Cristina García-Moncó**
Edificio Interfacultativo de la
Universidad de Cantabria
Instituto Internacional de Investigacio-
nes Prehistóricas de Cantabria
Avda. de los Castros, s/n
E - 39005 Santander
cristijarl@hotmail.com
- Sabine Gaudzinski-Windheuser**
Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
gaudzinski@rgzm.de
- Frank Gelhausen**
Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
gelhausen@rgzm.de
- Ole Grøn**
Langelands Museum
Jens Winthersvej 12
DK - 5900 Rudkøbing
olg@langelandkommune.dk
- Alexandra Güth**
Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
gueth@rgzm.de
- Daniela Holst**
Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
holst@rgzm.de
- Olaf Jöris**
Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
joeris@rgzm.de
- Maria José Iriarte**
Universidad del País Vasco
Area de Prehistoria
Grupo de Investigación de Alto
Rendimiento (9/UPV 155.130-
14570/2002)
C / Tomás y Valiente, s/n
E - 01006 Vitoria-Gasteiz (Alava)
mariajose.iriarte@ehu.es
- Lars Larsson**
Lunds Universitet
Institutionen för arkeologi och antikens
historia
Box 117
SE - 221 00 Lund
lars.larsson@ark.lu.se
- Jorge Martínez-Moreno**
Universitat Autònoma de Barcelona
Facultat de Lletres
Centre d'Estudis del Patrimoni
Arqueològic de la Prehistoria
E - 08193 Bellaterra
jorge.martinez@uab.es
- Rafael Mora Torcal**
Universitat Autònoma de Barcelona
Facultat de Lletres
Centre d'Estudis del Patrimoni
Arqueològic de la Prehistoria
E - 08193 Bellaterra
rafael.mora@uab.es
- Frank Moseler**
Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
moseler@rgzm.de

Dani Nadel

University of Haifa
Zinman Institute of Archaeology
Haifa
Israel 31905
dnadel@research.haifa.ac.il

Lasse Sørensen

Københavns Universitet
Saxo-Instituttet
and Sankt Hansgades Passage 11, 2th
DK - 2200 København N
soerensenlasse@hotmail.com

Elaine Turner

Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
turner@rgzm.de

Philipp R. Nigst

University of Cambridge
Division of Archaeology
Department of Archaeology &
Anthropology
G04, Faculty Building
Downing Street
GB - CB2 3DZ Cambridge
prn25@cam.ac.uk

Martin Street

Römisch-Germanisches Zentralmuseum
Forschungsbereich Altsteinzeit
Schloss Monrepos
D - 56567 Neuwied
street@rgzm.de

Ehud Weiss

Bar Ilan University
Faculty of Life Sciences and The
Institute of Archaeology
The Martin (Szusz) Department of Land
of Israel Studies and Archaeology
Ramat-Gan
Israel 52900

Roberto Ontañón

Edificio Interfacultativo de la
Universidad de Cantabria
Instituto Internacional de Investigacio-
nes Prehistóricas de Cantabria
Avda. de los Castros, s/n
E - 39005 Santander
ontanon_r@gobcantabria.es

Luis C. Teira

Edificio Interfacultativo de la
Universidad de Cantabria
Instituto Internacional de Investigacio-
nes Prehistóricas de Cantabria
Avda. de los Castros, s/n
D - 39005 Santander
luis.teira@gestion.unican.es

Stefan Wenzel

Römisch-Germanisches Zentralmuseum
Forschungsbereich Vulkanologie,
Archäologie und Technikgeschichte
An den Mühlsteinen 7
D - 56727 Mayen
wenzel@rgzm.de

Martina Sensburg

Abteistr. 9
D - 56170 Bendorf
sensburg@rgzm.de

Hartmut Tschauener

exeGesIS Spatial Data Management Ltd
Great House Barn
New Street
GB - LD3 0AH Talgarth, Powys
HartmutT@esdm.co.uk

Débora Zurro

Departament d'Arqueologia i
Antropologia
Institución Milá y Fontanals
CSICC/Egipciaques, 15
E - 08001 Barcelona
debora@bicat.csic.es

Arne Sjöström

Lunds Universitet
Institutionen för arkeologi och antikens
historia
Box 117
SE - 221 00 Lund
Arne.Sjostrom@ark.lu.se

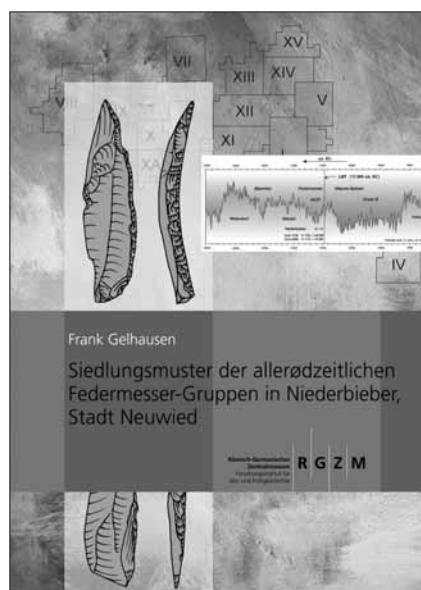
AUS DEM VERLAGSPROGRAMM

Frank Gelhausen

Siedlungsmuster der allerødzeitlichen Federmesser-Gruppen in Niederbieber, Stadt Neuwied

Der Ausbruch des Laacher See-Vulkans um 11000 v. Chr. hat mit einer mächtigen Bimsdecke die Landschaft am Mittelrhein versiegelt. In einer unvergleichlichen Momentaufnahme blieben so das Geländere relief, die Reste von Vegetation und Fauna erhalten, dazu viele Hinweise auf die Nutzung der Region durch den Menschen.

Der Fundplatz Niederbieber ist dabei für archäologische Untersuchungen von herausragender Bedeutung. Hier konnte auf einer ca. 1000 m² großen Fläche eine beträchtliche Zahl von Fundkonzentrationen freigelegt werden, die Einblick in die sonst kaum zu fassenden Siedlungsprozesse der spät-eiszeitlichen Federmesser-Gruppen ermöglichen. Der Autor hat in seinem Buch die Funde und Befunde des zentralen Flächenteils von Niederbieber analysiert. Die Ergebnisse seiner Untersuchungen liefern neue Erkenntnisse über die vor Ort ausgeführten Tätigkeiten, die Belegungsdauer der Fundkonzentration sowie die Lebensweise der Menschen am Ende der Eiszeit.



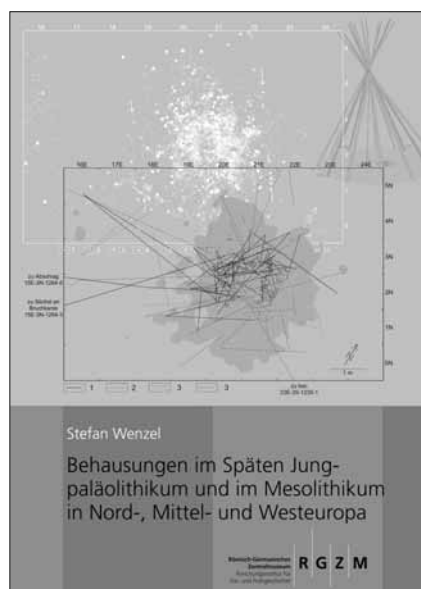
Monographien des RGZM, Band 90
302 S. mit 151 z. T. farb. Abb.,
15 Plänen, 4 Listen, 23 Taf.,
21 x 29,7 cm, Hardcover, fadengeheftet
ISBN 978-3-88467-158-0
86,- €

Stefan Wenzel

Behausungen im Späten Jungpaläolithikum und im Mesolithikum in Nord-, Mittel- und Westeuropa

Wo in der Zeit von 15000-5000 v. Chr. Jäger und Sammler in den Steppen und Wäldern Europas ihr Lager aufschlugen, blieben meist in großer Zahl Steinartefakte und Herdsteine zurück. Nur selten aber sind Wohnbauten anhand von erhaltenen Konstruktionselementen direkt nachweisbar.

In diesem Buch werden sechs Fundkonzentrationen daraufhin untersucht, ob es Indizien dafür gibt, dass ehemals Zeltwände einer diffusen Verteilung der Steinabfälle nach außen hin als Hindernis im Weg standen: Orp Ost und Rekem 10 in Belgien, Cepoy im Pariser Becken, Geldrop 3-2 in den südlichen Niederlanden, Berlin-Tegel IX sowie Hartmannsdorf 26 in Brandenburg. Bei diesen Siedlungsstrukturen wie bei den zum Vergleich heran-gezogenen Wohnbauten und nicht überdachten Lagerplätzen dieses Zeitabschnitts lassen sich ferner Arbeitsbereiche rekonstruieren, die Aussagen zur Organisation der jeweiligen lokalen Gruppen erlauben.



Monographien des RGZM, Band 81
183 S. mit 150 s/w-Abb., 4 Farbtaf.,
21 x 29,7 cm, Hardcover, fadengeheftet
ISBN 978-3-88467-136-8
70,- €

Verlag des Römisch-Germanischen Zentralmuseums, Mainz

Ernst-Ludwig-Platz 2 · 55116 Mainz · Tel.: 0 61 31/91 24-0 · Fax: 0 61 31/91 24-199
E-Mail: verlag@rgzm.de · Internet: www.rgzm.de

AUS DEM VERLAGSPROGRAMM



Monographien des RGZM, Band 73
176 S. mit 43 z.T. farb. Abb.,
13 Tab., 62 Plänen,
21 × 29,7 cm, Hardcover, fadengeheftet
ISBN 978-3-88467-120-7
44,- €



Monographien des RGZM, Band 69
231 S. mit 113 z.T. farb. Abb.,
1 Beil., 21 × 29,7 cm, Hardcover,
fadengeheftet
ISBN 978-3-88467-110-8
64,- €

Martina Sensburg · Frank Moseler

Die Konzentrationen IIb und IV des Magdalénien-Fundplatzes Gönnersdorf (Mittelrhein)

Der Magdalénien-Fundplatz Gönnersdorf bietet einzigartige Möglichkeiten der räumlichen Analyse eines jungpaläolithischen Siedlungsareals. Während die Konzentration IV bereits Gegenstand einer 1997 erschienenen Untersuchung war, handelt es sich bei Konzentration IIb um eine bislang unerforschte Siedlungsstruktur.

Die Konzentration IIb stellt eine Teilfläche der Großkonzentration II dar, deren zentrale Siedlungsstruktur (Konzentration IIa) bereits 2007 ausführlich behandelt wurde. Im Vordergrund steht nun, sowohl die Funktion der Siedlungsstrukturen in Konzentration IIb als auch ihr zeitliches und räumliches Verhältnis zu den benachbarten Konzentrationen IIa und III zu klären.

Eine erneute räumliche Analyse von Konzentration IV erschien sinnvoll, da sich besonders digitale Analyseverfahren seit der Erstbearbeitung erheblich verfeinert haben und nun einige vormals unbehandelte Teilaspekte untersucht werden konnten. Das führte hinsichtlich der Beziehung zwischen latenten und evidenten Befunden sowie der Artefaktherstellung in Konzentration IV zu detaillierten Ergebnissen.

Martina Sensburg

Die räumliche Organisation der Konzentration IIa von Gönnersdorf

Der Magdalénien-Fundplatz Gönnersdorf repräsentiert einen der europaweit seltensten Siedlungsbefunde des späten Jungpaläolithikums. Sein außergewöhnlicher Erhaltungszustand ermöglicht seit seiner Entdeckung 1968 einen beständigen Erkenntniszuwachs in Hinblick auf die Lebensweise eiszeitlicher Jäger und Sammler. So erfolgte bereits die grundlegende Untersuchung der Siedlungsstrukturen in den Großkonzentrationen I, III und IV. Die Behandlung der zentralen und zugleich fundreichsten Konzentration IIa stand bislang jedoch noch aus. Mit der vorliegenden Arbeit kann diese Lücke nun geschlossen werden.

Der Schwerpunkt der Analysen von Konzentration IIa liegt vor allem auf einer Rekonstruktion der alltäglichen Aktivitäten der ehemaligen Bewohner. Hierzu wird die räumliche Beziehung latenter Fundverteilungen zu den evidenten Befunden, wie z. B. dem zentralen Behausungsgrundriss, den Gruben und den Feuerstellen, ausführlich diskutiert. Hieraus sowie aus den Zusammensetzungsanalysen ergeben sich schließlich entscheidende Hinweise, die zu der Entwicklung eines ganz neuen Besiedlungsmodells nicht nur für Konzentration IIa, sondern für den gesamten Fundplatz führen.

Verlag des Römisch-Germanischen Zentralmuseums, Mainz

Ernst-Ludwig-Platz 2 · 55116 Mainz · Tel.: 0 61 31/91 24-0 · Fax: 0 61 31/91 24-199
E-Mail: verlag@rgzm.de · Internet: www.rgzm.de