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MESO2025 - 11th International Conference on the Mesolithic in Europe

Session 6

Settlements and Dwellings

Coordinated by Daniel Groß and Nicky Milner

This session delves into the details of Mesolithic settlement patterns and dwellings through intrasite analysis. Recent archaeological excavations and methodological advancements have broadened our understanding on Mesolithic dwellings, prompting a reevaluation of traditional interpretations and unveiling fresh insights into prehistoric lifeways. Increasingly, evidence is contesting the model of fully mobile lifestyles and seasonal occupation patterns, and thus presents unique challenges and opportunities for understanding settlement organisation at a micro-scale level.

Key areas of discussion include the latest developments in the field, such as high-resolution excavation techniques, advanced dating methods, and innovative scientific and analytical approaches. By zooming in on individual settlement sites, we aim to unravel the complexities of Mesolithic settlements and dwelling structures, including their architectural features, spatial organisation, and functional aspects. Moreover, we will critically examine the sources of evidence, considering the reliability and interpretative implications of archaeological data, stratigraphic sequences, and environmental proxies.

Through a synthesis of interdisciplinary perspectives and case studies from diverse geographic regions, this session seeks to address fundamental questions regarding Mesolithic settlement patterns and the socio-economic dynamics that were the foundation of these communities. We want to discuss the intertwinement of artefacts, constructions, elusive features and activities and also welcome theoretical and methodological studies that advance our knowledge of Mesolithic lifeways and prehistoric settlement organisation on an intrasite level.

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MESO2025 - 11th International Conference on the Mesolithic in Europe

ORAL PRESENTATION

Tuesday 16th September, h.12:30-12:45

EXCAVATION AND ANALYSIS OF VERY LARGE MESOLITHIC SITES IN THE CONTEXT OF PREVENTIVE ARCHAEOLOGY : FEEDBACK FROM THE SAINT-MARTIN-LA-GARENNE EXCAVATIONS (ÎLE-DE-FRANCE, FRANCE)

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The Mesolithic site of Saint-Martin-la-Garenne, in the Paris area, is located along the Seine river, about 50 kilometers west of Paris. It was discovered in 2018, following an archaeological survey which identified Middle Mesolithic occupations over an area of around 10 hectares. Following these surveys, a number of preventive excavations have be carried out between 2019 and 2022, including three focusing on the Mesolithic period. These three excavations cover a total area of around 3 hectares, but had to be carried out with limited time and resources. The excavation methodology had to adapt to these constraints, as well as to the nature and quality of conservation of the occupations, which were not always the same, with the risk of Mesolithic occupations mixing. One of the major challenges was to identify the areas with the greatest potential for information and analysis, in the middle of thousands of square metres with no real empty zone of Mesolithic remains. These sites are characterised by exceptional densities of remains, testifying to the intense frequentation of the area during the Middle Mesolithic : the majority of which is flint, but also macrolithic sandstone tools, faunal remains, bone industry and ornaments. This presentation will provide an opportunity to discuss the methodological choices we have made and had to make, and also to demonstrate the scientific contributions that excavation of sites of this type, with multiple constraints, can make.

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ORAL PRESENTATION

Tuesday 16th September, h.12:45-13:00

How long is a short stay?

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The Early Mesolithic period in Norway is securely placed on the microscale level. The settlement pattern is highly mobile and each site reflects single core families or small task groups. The sites often have a similar size and lithic composition. Comments and discussions of "short" occupations/stays flourish in the literature, but are rarely defined. How long is a short stay? If we do not have the means (or courage) to define the length of an occupation, the Early Mesolithic people have no room to grow and expand, socially or spatially. In this paper we ask the question: Was the Early Mesolithic really so monotonous? Can we discuss length of stays and degree of demographic complexity in a better way? Using both new and old criteria's for duration of occupation, for example; number of lithic artifacts, dwelling structures, technological strategies and apprenticeship, we want to shed new light on Early Mesolithic society and settlement structure. New excavation methods, uncovering larger coherent areas, also indicate a potential for discussing larger group composition during this period. Key words: Length of stays, lithic analysis, technological strategies, settlement patterns and group size, coastal and mountain sites

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ORAL PRESENTATION

Tuesday 16th September, h.13:00-13:15

Contemplations on Mesolithic cooking pits/pit hearths in Southeastern Norway and Western Sweden

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In 2022, the Museum of Cultural History excavated close to 40 structures interpreted as pit hearths/cooking pits at the site Knattås 2 in Sarpsborg municipality, Southeast Norway. The site presents the largest occurrence of this type of archaeological structure in Southeastern Norway/Western Sweden, and the radiocarbon dates from the site indicate several revisits of varying intensity through roughly a millennium spanning from c. 7700–6600 BCE. In general, Mesolithic cooking pits/pit hearths within the mentioned geographic regions are present on sites from around 7500 BCE onward, with only stray occurrences being older. Around the same time, we can observe certain changes in the technological aspects of the lithic traditions in the region, as well as climatic changes. The presentation will aim to consider the pit hearths from the Knattås site within the larger currents of change in the archaeological record during the Middle Mesolithic with regards to settlement patterns and landscape use, as well as to climatic and technological changes happening throughout the period.

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ORAL PRESENTATION

Tuesday 16th September, h.14:30-14:45

Unveiling the frozen Past: reindeer hunting and landscape use at the glacial Fetegga site in the Alpine wilderness of Western Norway

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The recent global warming-driven melting of high-altitude ice patches in the Norwegian mountains has led to the discovery of unprecedented archaeological assemblages linked to reindeer hunting and communication systems. However, as most glaciers and ice patches melted during the Holocene Thermal Maximum and reappeared at the transition to the Neolithic/sub-boreal period, very few Mesolithic ice patch sites have been recorded until the discovery of Fetegga in 2014. Fetegga offers a window into the complex social dynamics and adaptive strategies of Late Mesolithic hunter-gatherers. The strategic use of landscape and intimate knowledge of reindeer behaviour reflect sophisticated hunting practices that required cooperation, planning, and a deep understanding of the environment. The findings at Fetegga challenge traditional narratives of Mesolithic societies as simple and static, revealing a high degree of social complexity and economic specialisation. The site's well-preserved hunting structures and associated artefacts provide valuable insights into the ways Mesolithic people actively shaped their landscapes to create favourable hunting conditions, demonstrating their agency and resilience in the face of environmental changes. This study contributes to a broader understanding of human landscape use and adaptation in extreme environments, offering new perspectives on the socio-economic and cultural dimensions of Mesolithic life. By highlighting the interplay between environmental knowledge, social organisation, and technological innovation, the research at Fetegga underscores the dynamic and interconnected nature of Mesolithic societies.

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ORAL PRESENTATION

Tuesday 16th September, h.14:45-15:00

MESOLITHIC DEEP-PIT SYSTEMS IN FRANCE

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Over the past fifteen years, several research projects have been carried out in mainland France on the general theme of Mesolithic and Protohistoric deep pits. Thanks to discussions and field discoveries, a number of milestones have been reached on what can be considered a technical innovation of the Mesolithic period, both from a methodological point of view and in terms of scientific typology and chronology. They do not, of course, exhaust the subject, and many questions remain unanswered. The latest project, led by a network of Inrap researchers, has mapped all pit deposits dating from the Mesolithic period. Several hundred deposits of varying size and complexity have been discovered in recent years, from the north to the south of the country. The number of deposits, the regularity of discoveries and the chronological range involved, from Early to Late Mesolithic, confirm not only the global and enduring nature of this technical innovation, but also its disconnection from known cultural groups.

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ORAL PRESENTATION

Tuesday 16th September, h.15:00-15:15

Reconstructing the spatial organisation and architecture of Mesolithic structures at Star Carr

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Spatially plotted microwear results within three post-built structures at the Early Mesolithic site of Star Carr, North Yorkshire have evidenced activity zones associated with diverse stone tools used to process a variety of materials (e.g. wood, bone, antler, plant, hide, meat, fish). With 341 lithic artefacts analysed, this research represents the first microwear study focused on the post-built structures at Star Carr. Zones of activity within one of the structures suggest that the working of some materials was more spatially restricted than others, despite high densities of flint deposition. Additionally, differences were observed in tool use across each structure, highlighting that intra-site and inter-site variability in Mesolithic structures should be anticipated. Building on these findings, this paper will also present recent digital and experimental work on reconstructing the architecture of Mesolithic structures from Star Carr, which have shown how variation in form and use can be visualised and presented to a public audience.

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ORAL PRESENTATION

Tuesday 16th September, h.15:15-15:30

The Mesolithic sites of Neuenwalde, Northern Germany, and the advantages of settling along wetland edges

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The Mesolithic find area of Neuenwalde in the vicinity of the recent German North Sea coast is known already for several decades. There, larger stone tool surface scatters stretch along a sandy promontory above vast wetlands. Recently, a DFG funded project at the Lower Saxony Institute for Historical Coastal Research started to unravel the early Holocene landscape development of that area. It turned out that paludification and erosional processes shaped the landscape in a much a more detailed scale than expected, having created a picture of a highly structured, patchy landscape. Along with this, an intense archaeological survey led to the detection of different activity zones and time slices of stone age settlement and landscape interference. Traces of human inhabitation in different landscape settings gave insight into various activities. They range from well preserved fire sites and excavated flint clusters to pit features on the bog edge. In this presentation we are going to discuss the different aspects of Mesolithic dwelling activities in relation to the reconstructed landscape features and their development through time. Integrating archaeological and ethnological legacy data from other contexts, we are going to explore the role of wetland surroundings in long settlement traditions or as places of repeated use. Applying an ontological approach to the Mesolithic inhabitation in these areas, we would like to go beyond the ecological and economical perspective of hunter-gatherer landscape use and perception.

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Tuesday 16th September, h.15:30-15:45

A HOLEY TRINITY: REASSESSING THREE MESOLITHIC SITES ON THE EAST COAST OF IRELAND – TOWARDS NEW NARRATIVES

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This paper presents the results of a PhD thesis completed in 2024, dedicated to reassessing three shell-bearing sites on the east coast of Ireland excavated between 1946 and 1970. Their initial interpretation came to play a significant role in shaping the Later Mesolithic narrative on the island. After re-examining the archives from the original excavations, and revisiting the sites with contemporary (geo)archaeological methods, this research proposes to break down current interpretations and suggests new connections and narratives. Following Catherine Dupont and Grégor Marchand, who warned that shell-bearing sites should not be considered a site type "but rather one of a variety of stratigraphic units that make up the total settlement pattern", we question the relevance of "midden" as a category, which tends to emphasise commonalities between very diverse layers, features, sites, and landscapes, and to understate connections with non-shell-bearing sites. Instead, we propose an alternative interpretation, centred on the concept of terraforming understood as "a practice that involves the manipulation, alteration or construction of elements of the landscape by moving physical material" (Grier and Schwadron 2018). By doing such, we widen the perspective beyond an identity of material (shells) to explore some parallels with other sites of the same period – such as the "platforms" identified in the Irish Midlands, but also non-shell-bearing coastal sites. As a meaningful practice, terraforming transcends site types, material, local trends, scale in time and space, and landscape features, and suggests new connections in the past, and new collaborations in the future.

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ORAL PRESENTATION

Tuesday 16th September, h.15:45-16:00

A HOUSE IN THE REEDS, WOODEN CONSTRUCTIONS IN THE LAKE. THE MESOLITHIC SITE COMPLEX DAGSMOSSE JUSSBERG IN SWEDEN

Hallgren Fredrik * (1), Hinders Nathalie (2), Blaesild Paulina (3), Sjöström Arne (4)

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A series of Mesolithic sites with well-preserved organic material has been discovered in the Dagsmosse wetland, Sweden, during the last decade. This presentation focus on the settlement site Dagsmosse Jussberg, which was located on a reed island in a shallow lake during the phase of occupation (c. 9000-8500 cal BP). Sections of the site were destroyed by peat-cutting shortly before it was found by archaeologists. The remaining parts consists of a settlement including a large pit feature, currently interpreted as a sunken floor house. That a sizeable wooden construction made of a large number of well-preserved wooden stakes, as well as two wicker fish traps, have been located on the former lake bottom next to the site add to the complexity, not only of the Jussberg site but of the Dagsmosse wetland as whole. The presentation summarizes the preliminary results of the excavations and analyses of this multifaceted Mesolithic site complex.

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ORAL PRESENTATION

Tuesday 16th September, h.16:45-17:00

DWELLING PLACES IN THE NETHERLAND, THE KAMPEN HUT IN BROADER PERSPECTIVE

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Mesolithic sites in the Netherlands are mainly recognized as flint scatters. Especially in Pleistocene sandy sediments, where organic artefact and other features are not well preserved. Excavation methods are therefore primarily focused on sieving sediments in grid cells to obtain lithics. At the Kampen Reevediep site (province of Overijssel, Netherlands), surprisingly, we found seven postholes in a small hexagonal configuration, beneath a high density flint scatter. The relation between the scatter and the post holes led to an interpretation as a dwelling structure. Only a handful of other (possible) structures were known from the Netherlands, so it was difficult to compare the structure with other sites in the region. So, we had to search for other analogies in North West Europe and found many similar structures in Scandinavia and Great Britain. This led to new questions, where are the other structures? Do we miss these dwelling structures due to the way we excavate or to taphonomical processes in the Rhine Meuse delta? And if there are more similar structures do we have to change our models on Mesolithic mobility and land use? In this presentation we present some papers about the Mesolithic dwelling in Kampen and how it could affect future field strategies and models on Mesolithic mobility.

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ORAL PRESENTATION

Tuesday 16th September, h.17:00-17:15

Three Early Mesolithic (9th millennium BC) sunken house floors in south-eastern Finland

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For almost two decades, archaeological field work has been carried out annually in the Kuurmanpohja area (currently the city of Lappeenranta) in south-eastern Finland. These studies have produced significant new data, material and insight into the post-glacial settlement of the area and its subsequent adaptation to local conditions. Archaeological excavations have been conducted at five settlement sites, which have been radiocarbon-dated approximately between 8700 and 8100 BC. At three of these sites (Saarenoja 2, Muilamäki, Hiekkasilta-Hiekkakuoppa), sunken house floors (pithouses) have been discovered, which clearly indicates that this type of building was already known and used by the first settlers of the area and that this tradition continued for several centuries. What all these constructions have in common, in addition to their semi-subterranean structure, is that they have been recognized primarily based on clearly defined distributions of lithic finds and burnt bone fragments (high-density find scatters) and, secondarily, on varying patches of stained or coloured soil (cultural layer). This presentation provides a description of these buildings and their characteristics, as well as briefly discusses their broader context.

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ORAL PRESENTATION

Tuesday 16th September, h.17:15-17:30

Ljungaviken, a well-preserved Swedish site with over 58 Mesolithic houses and a dog burial

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Ljungaviken, on the Baltic Sea coast in southern Sweden, is an early Holocene settlement of significant importance. The site comprises the remains of at least 58 houses with different types of constructions, over 800 hearths, numerous flint artefacts and preserved bone material in some areas. Radiocarbon dating of 127 samples indicates occupation between approximately 6,600 and 6,200 BC. However, most of the site was probably used for a shorter time period, based on the interpretation of the transgression process. The excavations conducted in 2016 and 2020, prior to residential construction, covered over 10,000 square metres, revealing a well-preserved settlement protected by 0.5 to 4 metres of sand and gyttja. It should be noted that the actual site was larger than the excavated area. The Mesolithic houses constitute a unique northern European complex, preserved under extensive transgression layers. Several sunken floors were also filled with gyttja during the transgression process, preserving many details. The various forms of building types found are interpreted primarily as being associated with different functions, with residential buildings often featuring sunken floors, while other types of buildings are constructed differently. Analyses of the bone material preserved in a few houses, together with construction details, indicate settlement during the winter months. Details also suggest that the houses were used for several seasons. The preliminary results suggest a high degree of social complexity, as evidenced by the varied housing constructions, waste disposal practices within some abandoned houses, and the burial of a dog.

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ORAL PRESENTATION

Tuesday 16th September, h.17:30-17:45

Invisible practices in Mesolithic shell mound construction

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In the Holocene, estuaries formed in the valleys of the Sado and the Tagus Rivers in Portugal, where the repeated human occupation at specific sites resulted in accumulation of large Mesolithic shell mounds. The complex stratigraphy of these sites has been noted since the earliest investigations in the 1860's. Over the last decade, systematic micromorphological analysis of the shelly deposits and their stratigraphic contacts have revealed specific human actions involved in the formation of the mounds. Microstratigraphy and thermal alteration analysis of shells allowed for the identification of two major primary human actions: single tossing of shells, and transported mixing of previously deposited debris. Some of these debris were transformed in situ by compaction (possibly by trampling) and mass burning. Deposits likely resulting from shell cooking, were also identified. All these actions are invisible in macroscopic observations but become apparent through high-resolution analysis of the microstratigraphy layers showing striking similarities at three of the largest known sites: Cabeço da Amoreira and Cabeço da Arruda, in Muge, and Poças de São Bento in the Sado. Mesolithic hunter-gatherers deliberately produced and allocated shelly deposits and intentionally transformed and manipulated them repeatedly. Such repetition of common practices supports the idea of a protracted construction of these sites by through the same practices, across Muge and Sado contexts.

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POSTER

Tuesday 16th September, h.17:45-18:00

A Late Mesolithic household at Strandvägen, Motala

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Dwellings symbolize culture, give meaning to everyday activities and provide central places for a range of household activities. At Strandvägen in Motala, eastern Central Sweden, five dwellings have been studied in terms of indoor and outdoor activities. Here structural elements as well as spatial depositions of waste from bone craft, utilized lithics and bone- and antler tools, firewood selection and choices in diet and food consumption is used to illustrate hunter-gatherer households during the Late Mesolithic in Scandinavia, c. 5500-5000 cal BC. By studying methods of fishing and remains of fish processing it can be concluded that the inhabitants must have had ways of storage at the site. Through a combination of archaeobothanical studies and chemical analyzes we also confirm the exploitation of starch rich rhizomes and root tubers as part of the diet at the settlement. Post-built constructions, indoor hearths and estimated floor areas suggest the use of the dwellings as winter residences and probably utilized by multiple family units. Coeval ritual remains and burials emphasizes that these social units may have required rules for social interactions, for example in the form of decorated objects, ritual deposits, and burials.

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POSTER

Tuesday 16th September, h.17:45-18:00

Elusive dwellings in the Early Mesolithic of Western Norway

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Coastal Western Norway is a landscape that is rich in marine resources and holds a large amount of Early Mesolithic sites. Around 60 have been excavated in Vestland and Sunnmøre regions in Western Norway over the past 40 years, yet the presence of clear and proven dwelling structures from this period are scarce. Several of these locations are untouched by later human activity such as later stone age phases, agriculture or development, which should lead to optimal conditions for finding in-situ structures. Why are dwellings and other types of structures so hard to detect, is this related to methodological problems, or natural degradation processes after 10 000 years in the ground? Datable material is also extremely rare, and most sites are dated typologically based on lithic technology. To this day only a handful of sites have been successfully C14-dated to the Early Mesolithic within our study area. We want to explore the different factors that are affecting the archaeological record on this matter, and present three case studies from Øygarden outside Bergen in Western Norway, representing sites that contain possible dwelling structures.

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POSTER

Tuesday 16th September, h.17:45-18:00

Sedentary lifestyle in Late Mesolithic Western Norway?

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Sunken floor dwellings, rich deposits and large amounts of finds on Late Mesolithic sites of coastal Western Norway, in combination with C14-dates covering a long period of time, has long been considered an indication of a more sedentary way of life, in opposition to a highly mobile Early Mesolithic society. We will present two case studies of Late Mesolithic sites with sunken floor dwellings where depth studies of stratigraphic sequences, combined with different scientific approaches, suggest that these sites may be the result of multiple short visits rather than continuous occupation. Does this mean we have to reconsider our ideas of mobility in this period? In this study we will take a closer look at how to interpret C14-dating results from these sites and the implications this has for how we look at Late Mesolithic settlements of this kind in the region.

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Mesolithic settlements (9th to 6th millennia BC) at Roquemissou (Aveyron, France)

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The site of Roquemissou (Montrozier, Aveyron, France), on the south-western edge of the Massif Central, in a middle mountainous region, provides one of the most important regional stratigraphy of recent prehistory. Late Palaeolithic and Mesolithic occupations are particularly well documented. They show a succession of occupations from the middle of the 12th millennium BC to the middle of the 6th millennium BC. They then continue throughout the Neolithic period until around 2100 BC, forming a sequence of over 9000 years. During the Mesolithic period, occupation took place in a densely forested environment close to the river, where groups exploited wild plant and animal resources. They are mainly documented by their material production (flint, stone and bone industry), but also by a succession of different human settlements. Numerous hearths of various types are associated with these activities. There are also several pits, one of which stands out for both its size and the nature of its fill. Anthracological and stratigraphical evidence suggests that it was probably used for smoking hides. Such features suggest relatively long periods of occupation, although it is of course difficult to assess this objectively.