### POLSKA AKADEMIA UMIEJĘTNOŚCI KOMISJA PALEOGEOGRAFII CZWARTORZĘDU

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### POST-PLENIGLACIAL RE-COLONISATION OF THE GREAT EUROPEAN LOWLAND

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### PALAEOGEOGRAPHY OF EUROPEAN LOWLAND DURING THE LATE VISTULIAN

#### Teresa MADEYSKA

Abstract. An outline of the palaeogeographical changes in the territory of European Lowland during the Late Vistulian is presented. A brief review of the environmental studies provided by European scientists contains: processes of the Scandinavian ice sheet recession and deglaciation, the Baltic Ice Lake history, main patterns of fluvial activity, aeolian processes and soil development differentiated both in time and space, as well as problems of the Late Vistulian vegetation reconstructions. The climatic evidence is reported leading to distinguish main climatostratigraphic units and less important metachronic regional climatic fluctuations. The influence of the North Atlantic polar front shifting and the oceanic thermohaline circulation changes on the terrestial climatic conditions in Europe are shown.

## REVIEW OF THE FAUNAL EVIDENCE FROM THE LATE GLACIAL IN NORTHERN EUROPE

#### **Bodil BRATLUND**

Abstract. The archaeological cultures found in the European Plains during the Late Glacial are all distributed over large territories and thus over possibly quite differing and varied resource areas. However, none of the major groups have as yet provided site assemblages to cover the entire yearly cycle. New datings and reanalysis of old material suggests, that we will never again be able to describe a particular group with a label like "reindeer hunter" or "elk hunter", and that for whatever new site encountered the seasonal limitations of the assemblage must be kept in mind.

# EVOLUTION OF THE MALACOLOGICAL ASSEMBLAGES IN NORTH POLAND DURING THE LATE GLACIAL AND EARLY HOLOCENE

#### Witold Paweł ALEXANDROWICZ

Abstract. Rich molluscan assemblages have been found in the Late Glacial and Early Holocene deposits in Northern Poland. The fauna is generally connected with lake sediments such as lacustrine chalk and calcareous gyttja but sporadically was described from calcareous tufa, fluviatile deposits as well as soil profiles. Several types of molluscan assemblages can be distinguished. They reflect changes of climate, the differentiation of habitats as well as the evolution of lakes and water bodies. The succession of molluscan communities was studied in detail at four localities and supplemented by malacological data from several profiles described by other authors.

## COLONISATION AND RESETTLEMENT OF EUROPE IN THE LATE GLACIAL: A VIEW FROM THE WESTERN PERIPHERY

#### R. N. E. BARTON

Abstract. Recent work on the Lateglacial of north-west Europe has concentrated on the early spread of the Magdalenian following the Last Glacial Maximum at 18,000 BP. Current AMS radiocarbon evidence indicates that this probably occurred around 13,200 BP and was mainly restricted to the loessic plateau lands. In this paper we examine evidence for recolonisation of areas on the edge of the main Magdalenian distribution, in the deglaciated sandier soils of the north European plain. Here, the earliest AMS radiocarbon dates for the Creswellian and Hamburgian suggests that reoccupation was delayed by up to half a millennium. We examine the Magdalenian influences on the Creswellian, and the subsequent development of Final Upper Palaeolithic industries in Britain.

## THE MAGDALENIAN SITE OF EYSERHEIDE AND THE LATE GLACIAL HUMAN COLONISATION OF THE SOUTHERN NETHERLANDS

#### **Eelco RENSINK**

A b s t r a c t . In the southern Netherlands, Magdalenian sites represent the earliest traces of human settlement after the Last Glacial Maximum (around 20–18 kyr BP). The paper deals with the nature of these sites, making special reference to the Magdalenian site of Eyserheide located in the hilly loess region of the Netherlands. It is concluded that Magdalenian sites in the northern loess area reflect an initial pioneering phase of occupation (cf. Housley *et al.* 1997). In contrast to more southerly regions, this phase of occupation seems not to have been followed by a permanent (year round) or residential phase of occupation.

# LA GROTTE DU BOIS LAITERIE (PROFONDEVILLE, BELGIQUE): HALTE DE CHASSE MAGDALENIENNE

Lawrence G. STRAUS et Marcel OTTE

Abstract. Le Bois Laiterie offre une vision sur un mode de vie magdalénien à la fin du Dryas au début du Bölling. Il s'agit d'une halte de chasse orientée vers le cheval et restée en contact avec les milieux d'origine au Bassin Parisien.

### CIVILISATIONS DU TARDIGLACIAIRE EN EUROPE DU NORD-OUEST

#### Marcel OTTE

A b s t r a c t . Les Plaines du Nord manifestent une lente remontée des chasseurs au tardi-glaciaire, du Sud-ouest vers le Nord-Est. D'abord par la voie des collines, cette diffusion s'est rendue vers les plaines exondées de la Mer du Nord. Les courants centraux (Bassin parisien) et latéraux (Angleterre) se retrouvent finalement en Belgique et aux Pays-Bas.

#### CONCERNING CHRONOLOGY OF THE HAMBURGIAN CULTURE

#### Jan Michał BURDUKIEWICZ

A b s t r a c t . The oldest recolonisation of Northern Europe after the last glaciation, represented by Hamburgian culture is dated by archaeological, palynological, geological and radiocarbon methods. The results of over 60 years-research on chronological determination of the Hamburgian culture are rather pessimistic. Archaeological materials for good  $^{14}\mathrm{C}$  determination are still very rare or they are weakly associated with settlement units. Some "wiggles" in  $^{14}\mathrm{C}$  determinations observed in the Netherlands between 12–10.7 Kyr BP rather exclude good dating of the youngest Hamburgian sites. Recent research of fluctuation of atmospheric  $\Delta^{14}\mathrm{C}$  observed from 12.6 to 12.1 Kyr BP supports explanation of the limits of radiocarbon age determination.

Variable Late Glacial palynological and geological profiles as well as contradictions with Greenland ice core chronology expressed with accuracy up to  $\pm 200$  years, and observed decrease in  $\Delta^{14}C$  of Late Glacial make it difficult to reconstruct in detail temporal determination of environmental and cultural changes. The most possible Hamburgian culture existed during the Bølling interstadial ( $\sim 12-13$  Kyr BP according to conventional  $^{14}C$  age determination or  $\sim 13,5-15$  Kyr BP according to calibrated chronology). The Late Glacial context of Northern Europe suggests that the Hamburgian appeared 13.2 Kyr BP and existed up to 11.6 Kyr BP in  $^{14}C$  conventional years.

Short existence of the Hamburgian and dispersed <sup>14</sup>C datings exclude recently well-established chronology and temporal subdivision. The suggested division of the Hamburgian into "classic" shouldered point group and Havelte tanged point group still needs better evidence.

### SOME REMARKS CONCERNING THE EXCAVATIONS AT MEIENDORF AND STELLMOOR IN THE TUNNELVALLEY OF AHRENSBURG BY ALFRED RUST

#### Gernot TROMNAU

A b s t r a c t . With the excavations of Meiendorf and Stellmoor 60 yers ago, unique till today, Alfred Rust gave important impulses to the comprehension of the cultures of the Late Palaeolithic in the North of Central Europe and beyond. Many of the results obtained thereby are still essential elements of Palaeolithic research which we owe to the energy and to the shrewdness of this great archaeologist.

# LATE PALAEOLITHIC SETTLEMENT IN DENMARK – HOW DO WE READ THE RECORD?

#### Berit Valentin ERIKSEN

Abstract. Evidently, many questions remain open with respect to the Late Palaeolithic of Denmark, and there is a lot of work still to be done. Major problems result from a severe lack of absolute dating and chronostratigraphical observation. An obvious solution to these problems is more systematic fieldwork. 50 years ago Erik Westerby used systematic prospection and surveying to find the first Late Palaeolithic settlement site in Denmark. We must do the same to locate sites with preserved organic remains.

### PERSPECTIVES ON THE COLONISATION OF THE SCANDINAVIAN PENINSULA

#### Lars LARSSON

Abstract. Radiometric datings of different animal species suggest that suitable conditions for settlement in southern Sweden may have existed from a late part of the Bølling interstadial. Large-scale settlement may be related to the rise of a land bridge to southern Sweden in the later part of the Allerød, coinciding with the Bromme Culture. A renewed meltwater outlet in the Öresund combined with a heavy fall in temperature at the start of the Younger Dryas seriously jeopardized the chances for several animal species to exist in southern Sweden. Despite this, there are indications of continued human presence in Southern Sweden. During the Allerød and the Younger Dryas, the hunters' main prey was reindeer, but horse and elk were also hunted. During the transition from the Younger Dryas to the Preboreal, there was extensive colonisation of the whole Norwegian coast – a distance of 1600 km – in the course of a few generations. This shows a significant coastal settlement with great mobility.

### THE FINAL PLEISTOCENE RECOLONISATION OF THE NORTHWESTERN POLISH PLAIN

#### Michał KOBUSIEWICZ

Abstract. After 100,000 years long break the northwestern Polish Plain was recolonised at the end of the Pleistocene during the Bölling oscillation warming by human groups of Hamburgian Culture. Climatic conditions during the Older Dryas were too harsh for humans. The renewed wave of settlers, known as Backed Blades Technocomplex (Federmesser, Tarnovien) was possible only after the Alleröd warming. At the end of this period some groups of the Bromme-Lyngby culture appeared in the discussed area. The following Younger Dryas was a realm of Svidero-Ahrensburgian Complex with characteristic tanged points of Svidry and Ahrensburg type. Some sites of this kind are dated to the very beginning of the Preboreal. Because the latitudinal valleys played the role of natural routes for communication, the area under discussion throughout all of the Final Pleistocene was culturally linked to the northwest European Plain.

# THE HAMBURGIAN SETTLEMENT AT MIRKOWICE: RECENT RESULTS AND RESEARCH PERSPECTIVES

### Jacek KABACIŃSKI, Bodil BRATLUND, Lucyna KUBIAK, Daniel MAKOWIECKI, Romuald SCHILD and Kazimierz TOBOLSKI

A b s t r a c t . In the early 1990s another Hamburgian settlement was discovered in the northern part of the Polish Plain – the most eastern and northern settlement known up to now. The paper discusses initial results of the international research program that was built up around this discovery: (1) stratigraphy and geomorphology of the site; (2) general characteristic of the lithic industry, and (3) faunal remains. The site at Mirkowice creates an exceptional situation for modern environmental studies of the Late Glacial, including reconstruction of plant and animal assemblages of that times and proper correlation of geological and geomorphological processes of the area with the human occupation. Altogether, the Mirkowice project has a research potential to be a benchmark for a modern chronostratigraphy of the Late Glacial in the Lowland.

# STRATIGRAPHY, PALAEOECOLOGY AND RADIOCHRONOLOGY OF THE SITE OF CAŁOWANIE

Romuald SCHILD, Kazimierz TOBOLSKI, Lucyna KUBIAK-MARTENS, Mieczysław F. PAZDUR, Anna PAZDUR, J. C. VOGEL and Thomas W. STAFFORD Jr.

Abstract. The site of Całowanie is one of the most important, if not the most important, late Lateglacial and early Holocene sites of the North European Plain. It is a multi-level cultural complex composed of over twenty occupational entities, most of which are sealed by mineral and biogenic deposition. The cultural deposits of the site cover a time span from an early Alleröd to a late Boreal or from ca. 11,900 to 8,300 years BP (uncalibrated).

### MENSCHLICHE PENETRATION DER HÖHLEN IM MITTLEREN TEIL DER KRAKOWSKO-CZĘSTOCHOWSKA – HOCHEBENE ZWISCHEN DEM 18. UND DEM 11. JAHRTAUSEND (VOM INTERSTADIAL LASCAUX BIS ZUM INTERSTADIAL ALLERÖD)

#### Krzysztof CYREK

Abstract. Hier beschriebene Höhlefundstellen wurden 1989–1995 geforscht. Wie es scheint, hat am Anfang des hier umrissenen Zeitraums (18.–16. Jahrtausend B.P.) im Rahmen der Epigravettientradition eine Kulturverbindung zwischen dem Gebiet des Polnischen Jura und dem im inneren Karpatenbogen liegenden Gelände bestanden. Dies führt uns zu der Annahme, daß eben von Süden hier während der Lascaux-Erwärmung erste Menschengruppen auf die mitteleuropäische Hochebene einwandern konnten (Deszczowa Höhle). Dies wird auch durch den Austausch von Feuersteinrohstoff bestätigt.

Am Ende der uns interessieren den Zeitperiode (12.–11. Jahrtausend B.P.) sind dagegen im Rahmen des Spätmagdalenien die Einflüsse Westeuropas in ihrer Wirkung sehr deutlich (Krucza skała).

# LATE UPPER AND LATE PALAEOLITHIC IN THE CZECH REPUBLIC

#### Slavomil VENCL

Abstract. The Moravian Late Palaeolithic settlement seems to have been less rich than that of Bohemia, though the frequency of the Moravian sites is certainly non-randomly influenced by the research priorities concentrated in the local splendid Upper Palaeolithic and even earlier cultures.

### POSTPLENIGLACIAL REPEOPLING OF THE HUNGARIAN PLAIN

#### V. T. DOBOSI

Abstract. The postpleniglacial environment of the Hungarian Plain was mosaic-like. The surface is a mixture of the recent alluvium, loess-covered ancient hills, wind-blown sand dunes, and saline oxbow lakes. The flora-spectrum is characterised by the advance of deciduous trees, the Holocene being marked by the appearance of the *Acer tataricum*. The mammalian fauna becomes depleted, disharmonic and unbalanced (Bajot and Palank climato-faunistic phases). Two cultural phyla are identified in the second part of LUP:

- the younger strata of the Epigravettian (younger blade) sites (Dunakanyar, Jaszsag),

- sites of Alleröd-oscillation with small artefacts made by the Mesolithic technique, but without Mesolithic types.

### LES ORIGINES DE LA RÉCOLONISATION DE LA PARTIE SEPTENTRIONALE DE L'EUROPE CENTRALE APRÈS LE PLÉNIGLACIAIRE

#### Janusz K. Kozłowski

Résumé. L'article est consacré à la question de l'intensité et de la structure de l'habitat autour des Carpates occidentales dans la période juste avant le maximum du Pléniglaciaire supérieur (autour de 20 Kyr B. P.), pendant le maximum (20–18 Kyr) et entre le maximum et les premiers rechauffements postpléniglaciaires (Lascaux, Pré-Bölling, Bölling). Du point de vue taxonomique il s'agit du passage du Gravettien récent à pointes à cran à l'Epigravettien qui a eu lieu autour de 21–20 Kyr B.P. et, plus tard, de la formation des groupes locaux de l'Epigravettien du Bassin Carpatique. Le Magdalénien n'apparaît qu'en Moravie et dans le Sud de la Pologne à partir de Pré-Bölling et surtout au Bölling.

### TERMINAL PALAEOLITHIC OF UKRAINE, BELARUS AND LITHUANIA

(Survey of cultural differentiation)

#### Leonid ZALIZNYAK

Abstract. Two, quite different cultural worlds developed at the terminal Palaeolithic in the western part of Eastern Europe. To the south from Kiev to the Black Sea coast there were groups of Gravettian culture tradition: Late Molodova, Epigravettian, Osokorivka, Shan-Coba. On the north, from Kiev to the Baltic Sea coast during the Alleröd and Younger Dryas periods, units with pedunculated points: Lyngby, Krasnosilya and Świdry cultures developed.

# THE POPULATION OF SOUTH RUSSIAN PLAIN AFTER THE MAXIMUM OF THE SECOND PLENIGLACIAL

#### Vadim COHEN

Abstract. The paper basically challenges palaeoecology, chronology and taxonomy of both Upper and Final Palaeolithic through South Eastern European Plain since the second half of the Pleniglacial B up to the Preboreal. Recently received and summarised palynological evidences reflect the alteration of several stadials and interstadials, *i.e.* tangible changes in palaeoecological situation. It is quite reasonable to suppose, that the so-called "steppe-zone" should be chronologically limited within the time-span 20–18000 BP, consistent with Anetovka-Amvrosievka chronological horizon. The analyses of the subsequent Upper Palaeolithic development allow us to consider rather complex taxonomical structure, whereas each of the examined chronological horizons embrace cultural polyphony. Some causes and effects parameters of this process must be taken into account.

# INTENSIFICATION OF SETTLEMENT IN THE LATE GLACIAL OF SOUTH-WESTERN BALKANS

#### Dušan MIHAILOVIĆ

Abstract. This paper deals with intensification of the settlement of caves and rock-shelters in the southwestern Balkans during the Late Glacial. Diachronous change is discussed along with regional differences in the structure of chipped stone industries and participation of particular faunal remains. It was assumed that homogeneity of material remains recorded in stratigraphy of the majority of sites, along with occurrence of mineral and food resources extracted in the sites' vicinity, could imply not only to restricted mobility of bands in that period, but equally to the organized settlement system in which each site had particular role in the annual cycle of resources exploitation.