LES SÉANCES DE LA SOCIÉTÉ PRÉHISTORIQUE FRANÇAISE

Les Séances de la Société préhistorique française sont organisées deux à trois fois par an. D'une durée d'une ou deux journées, elles portent sur des thèmes variés : bilans régionaux ou nationaux sur les découvertes et travaux récents ou synthèses sur une problématique en cours dans un secteur de recherche ou une période en particulier.

La Société préhistorique française considère qu'il est de l'intérêt général de permettre un large accès aux articles et ouvrages scientifiques sans en compromettre la qualité ni la liberté académique. La SPF est une association à but non lucratif régie par la loi de 1901 et reconnue d'utilité publique, dont l'un des buts, définis dans ses statuts, est de faciliter la publication des travaux de ses membres. Elle ne cherche pas le profit par une activité commerciale mais doit recevoir une rémunération pour compenser ses coûts de gestion et les coûts de fabrication et de diffusion de ses publications.

Conforméméent à ces principes, la Société préhistorique française a décidé de proposer les actes des Séances en téléchargement gratuit sous forme de fichiers au format PDF interactif. Bien qu'en libre accès, ces publications disposent d'un ISBN et font l'objet d'une évaluation scientifique au même titre que nos publication papier périodiques et non périodiques. Par ailleurs, même en ligne, ces publications ont un coût (secrétariat d'édition, mise en page, mise en ligne, gestion du site internet) : vous pouvez aider la SPF à poursuivre ces activités de diffusion scientifique en adhérent à l'association et en vous abonnant au *Bulletin de la Société préhistorique française* (voir au dos ou sur http://www.prehistoire.org/form/515/736/formulaire-adhesion-et-ou-abonnement-spf-2014.html).

LA SOCIÉTÉ PRÉHISTORIQUE FRANÇAISE

La Société préhistorique française, fondée en 1904, est une des plus anciennes sociétés d'archéologie. Reconnue d'utilité publique en 1910, elle a obtenu le grand prix de l'Archéologie en 1982. Elle compte actuellement plus de mille membres, et près de cinq cents bibliothèques, universités ou associations sont, en France et dans le monde, abonnées au *Bulletin de la Société préhistorique française*.

Tous les membres de la Société préhistorique française peuvent participer :

- aux séances scientifiques de la Société Plusieurs séances ont lieu chaque année, en France ou dans les pays limitrophes. Le programme annuel est annoncé dans le premier *Bulletin* et rappelé régulièrement. Ces réunions portent sur des thèmes variés : bilans régionaux ou nationaux sur les découvertes et travaux récents ou synthèses sur une problématique en cours dans un secteur de recherche ou une période en particulier;
- aux Congrès préhistoriques de France Ils se déroulent régulièrement depuis la création de la Société, actuellement tous les quatre ans environ. Leurs actes sont publiés par la Société préhistorique française. Depuis 1984, les congrès se tiennent sur des thèmes particuliers;
- à l'assemblée générale annuelle L'assemblée générale se réunit en début d'année, en région parisienne, et s'accompagne toujours d'une réunion scientifique. Elle permet au conseil d'administration de rendre compte de la gestion de la Société devant ses membres et à ceux-ci de l'interpeller directement. Le renouvellement partiel du conseil se fait à cette occasion.

Les membres de la Société préhistorique française bénéficient :

- d'information et de documentation scientifiques Le *Bulletin de la Société préhistorique française* comprend, en quatre livraisons de 200 pages chacune environ, des articles, des comptes rendus, une rubrique d'actualités scientifiques et une autre sur la vie de la Société. La diffusion du bulletin se fait par abonnement annuel. Les autres publications de la SPF Mémoires, Travaux, Séances, fascicules des Typologies de la Commission du Bronze, Actes des Congrès, Tables et index bibliographiques ainsi que les anciens numéros du *Bulletin* sont disponibles au siège de la Société préhistorique française, sur son site web (avec une réduction de 20 % pour les membres de la SPF et téléchargement gratuit au format PDF lorsque l'ouvrage est épuisé) ou en librairie.
- de services Les membres de la SPF ont accès à la riche bibliothèque de la Société, mise en dépôt à la bibliothèque du musée de l'Homme à Paris.

Régie par la loi de 1901, sans but lucratif, la Société préhistorique française vit des cotisations versées par ses adhérents. Contribuez à la vie de notre Société par vos cotisations, par des dons et en suscitant de nouvelles adhésions autour de vous.

ADHÉSION ET ABONNEMENT 2014

Le réabonnement est reconduit automatiquement d'année en année*.

Paiement en ligne sécurisé sur

www.prehistoire.org

ou paiement par courrier : formulaire papier à nous retourner à l'adresse de gestion et de correspondance de la SPF : BSPF, Maison de l'archéologie et de l'ethnologie

Pôle éditorial, boîte 41, 21 allée de l'Université, 92023 Nanterre cedex

1. PERSONNES PHYSIQUES	Zo	ne €**	Hor	s zone €
Adhésion à la Société préhistorique française et abonnement au Bulletin de la	Sociét	é préhistorique	fran	çaise
➤ tarif réduit (premier abonnement, étudiants, moins de 26 ans, demandeurs d'emploi, membres de la Prehistoric Society***)		40 €		45 €
➤ abonnement / renouvellement		75 €		80 €
OU —				
Abonnement au Bulletin de la Société préhistorique française				
➤ abonnement annuel (sans adhésion)		85 €		90 €
OU - Adhásian à la Caciátá nuáhistariana francaisa				
Adhésion à la Société préhistorique française		••		•••
> cotisation annuelle		25 €		25 €
2. PERSONNES MORALES				
Abonnement au Bulletin de la Société préhistorique française				
➤ associations archéologiques françaises		110 €		
➤ autres personnes morales		145 €		155 €
Adhésion à la Société préhistorique française				
➤ cotisation annuelle		25 €		25 €
NOM : PRÉNOM :				
ADRESSE COMPLÈTE :				
TÉLÉPHONE :				
			. <i>,</i> _	
E-MAIL:				
VOUS ÊTES: □ « professionnel » (votre organisme de rattachement) : □ « bénévole » □ « étudiant » □ « autre » (préciser) :				
Date d'adhésion et / ou d'abonnement : / / /		••••••	•••••	•••••
Merci d'indiquer les période(s) ou domaine(s) qui vous intéresse(nt) plus par		èrement :		
Date, signature :				
Les chèques doivent être libellés au nom de la Société préhistorique française. Le paiement present et Eurocard) ainsi que le paiement par virement à La Banque Postale • Paris IDF cencedex 15, France • RIB : 20041 00001 0040644 J020 86 • IBAN : FR 07 2004 1000 0100 4064 4 Toute réclamation d'un bulletin non reçu de l'abonnement en cours doit se faire au plus ta envoyer une enveloppe timbrée (tarif en vigueur) avec vos coordonnées lorsque vous souh ture acquitée et/ou le timbre SPF de l'année en cours, et au besoin une nouvelle carte de m	tre fina J02 086 rd dan aitez re	ncier • 11, rue Bo 5 • BIC : PSSTFRI s l'année qui suit ecevoir un reçu fi	ourseu PPPAI . Mere	ıl, 75900 Par R. ci de toujour
N° de carte bancaire : Date d'expirati		/	sig	nature :

^{*}: Pour une meilleure gestion de l'association, merci de bien vouloir envoyer par courrier ou par e-mail en fin d'année, ou en tout début de la nouvelle année, votre lettre de démission.

^{**:} Zone euro de l'Union européenne : Allemagne, Autriche, Belgique, Chypre, Espagne, Estonie, Finlande, France, Grèce, Irlande, Italie, Lettonie, Luxembourg, Malte, Pays-Bas, Portugal, Slovaquie, Slovánie.

^{***:} Pour les moins de 26 ans, joindre une copie d'une pièce d'identité; pour les demandeurs d'emploi, joindre un justificatif de Pôle emploi; pour les membres de la Prehistoric Society, joindre une copie de la carte de membre; le tarif « premier abonnement » profite exclusivement à des membres qui s'abonnent pour la toute première fois et est valable un an uniquement (ne concerne pas les réabonnements).



MESOLITHIC PALETHNOGRAPHY

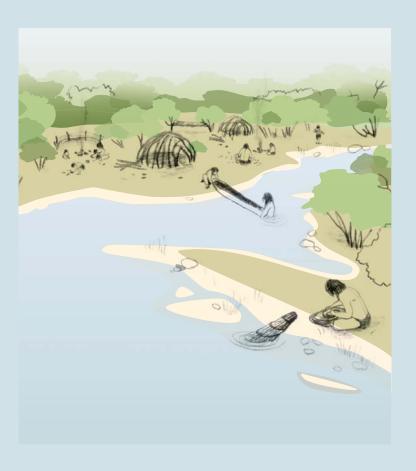
RESEARCH ON OPEN-AIR SITES BETWEEN LOIRE AND NECKAR

PROCEEDINGS FROM THE INTERNATIONAL ROUND-TABLE MEETING IN PARIS (NOVEMBER 26–27, 2010)

as part of sessions organised by the Société préhistorique française

Published under the direction of

Boris Valentin, Bénédicte Souffi, Thierry Ducrocq, Jean-Pierre Fagnart, Frédéric Séara, and Christian Verjux



The series "Séances de la Société préhistorique française" is available on-line at:

www.prehistoire.org

Cover drawing by Marie Jamon

Persons in charge of the "Séances de la Société préhistorique française" : Sylvie Boulud-Gazo and Jean-Pierre Fagnart
Series Editor: Claire Manen
Editorial Secretary, layout : Martin Sauvage
Webmaster : Ludovic Mevel

Société préhistorique française (reconnue d'utilité publique, décret du 28 juillet 1910). Grand Prix de l'Archéologie 1982.

Head office: 22, rue Saint-Ambroise, 75011 Paris (France)

Tel.: 00 33 1 43 57 16 97 – Fax: 00 33 1 43 57 73 95 – E-mail: spf@prehistoire.org

Web site: www.prehistoire.org

Office adress:

Maison de l'archéologie et de l'ethnologie, Pôle éditorial, boîte 41, 21 allée de l'Université, F-92023 Nanterre cedex (France) Tel.: 00 33 1 46 69 24 44 La Banque Postale Paris 406-44 J

This publication has been supported by the French Ministry of Culture and Communication, the Centre national de la recherche scientifique, the Institut national de recherches archéologiques préventives (INRAP), and the laboratory "Ethnologie préhistorique", UMR 7041 "ArScAn" (Nanterre).

© Société préhistorique française, Paris, 2013. All rights reserved. No part of this publication may be reproduced, or transmitted, without prior permission except for brief excerpts in connection with reviews or scholarly analysis.

ISSN 2263-3847 ISBN 2-913745-51-2 (on-line)

CONTENTS

— Introduction: Towards a mesolithic palethnology	
CURRENT RESEARCH CONCERNING MESOLITHIC OPEN-AIR SITES	
Bénédicte Souffi, Fabrice Marti, Christine Chaussé, Anne Bridault, Éva David, Dorothée Drucker, Renaud Gosselin, Salomé Granai, Sylvain Griselin, Charlotte Leduc, Frédérique Valentin and Marian Vanhaeren — Mesolithic occupations on the edge of the Seine: spatial organisation and function of the site of 62 rue Henry-Farman, Paris (15th arrondissement)	13
Daniel Mordant, Boris Valentin and Jean-Denis Vigne — Noyen-sur-Seine, twenty-five years on	37
Joël Confalonieri and Yann Le Jeune — The Mesolithic site of Haute-Île at Neuilly-sur-Marne (Seine-Saint-Denis): preliminary results	51
Christian Verjux, Bénédicte Souffi, Olivier Roncin, Laurent Lang, Fiona Kildéa, Sandrine Deschamps and Gabriel Chamaux — <i>The Mesolithic of the Centre region: state of research</i>	69
Fréderic Séara and Olivier Roncin — Mesolithic valley floor occupations: the case of Dammartin-Marpain in the Jura	93
ELEMENTS OF PALETHNOGRAPHY: FUNCTIONNAL DYNAMICS OF MESOLITHIC OPEN-AIR SITES	
Lorène Chesnaux — Microliths from 62 rue Henry-Farman, Paris (15th arrondissement): specific arrows for different types of game hunted in particular places?	119
Sylvain Griselin, Caroline Hamon and Guy Boulay — Manufacture and use of Montmorencian prismatic tools: the case of 62 rue Henry-Farman, Paris (15th arrondissement)	133
Colas Guéret — Character and variability of Early Mesolithic toolkits in Belgium and Northern France: the contribution of a functional approach	147
Olivier Bignon-Lau, Paule Coudret, Jean-Pierre Fagnart and Bénédicte Souffi — <i>Preliminary data</i> concerning the spatial organisation of Mesolithic remains from locus 295 of Saleux (Somme): a faunal perspective	169
Thierry Ducrocq — The 'Beuronian with crescents' in Northern France: the beginnings of a palethnological approach	189
Gabrielle Bosset and Frédérique Valentin — Mesolithic burial practices in the northern half of France: isolated burials and their spatial organisation	207
Gunther NOENS — Intrasite analysis of Early Mesolithic sites in Sandy Flanders: the case of Doel-"Deurganckdok J/L, C3"	217
Philippe Crombé, Joris Sergant and Jeroen De Reu — The use of radiocarbon dates in unraveling Mesolithic palimpsests: examples from the coversand area of North-West Belgium	235
Claus Joachim KIND — Tiny stones in the mud. The Mesolithic sites of Siebenlinden (Rottenburg, Raden-Württemberg, South West Germany)	251



Mesolithic Palethnography
Research on open-air sites between Loire and Neckar
Proceedings from the international round-table meeting, Paris, November 26–27, 2010
Boris Valentin, Bénédicte Souffi, Thierry Ducrocq, Jean-Pierre Fagnart,
Frédéric Séara & Christian Verjux (eds.)
Paris, Société préhistorique française, 2013
(Séances de la Société préhistorique française, 2-2)
p. 37–49
www.prehistoire.org
ISSN 2263-3847 – ISBN 2-913745-51-2 (on-line)

Noyen-sur-Seine, twenty-five years on

Daniel Mordant, Boris Valentin & Jean-Denis Vigne

Abstract: This chapter summarises our current understanding of the site of Noyen-sur-Seine by highlighting several particular aspects starting from the field and leading up to perspectives which may be explored in the light of current Mesolithic research. Following a brief history of this groundbreaking research, several successive topics will be addressed: the sedimentary dynamics of the anthropic deposits, the possible origin and differential preservation of the remains (D. M.), previously published information and new perspectives concerning the faunal material (J.-D. V.), lithic industries and human remains (B. V.). This outline should by no means be confused with the presentation of a fixed research program, but rather a call for new research incorporating the many projects that remain to be elaborated or strengthened.

BRIEF HISTORY OF RESEARCH (D. M.)

THE BROADENED SCOPE of Mesolithic research is largely ■ due to the increased activity of rescue archaeology. The site of Haut-des-Nachères at Noyen-sur-Seine (fig. 1), excavated over five summer seasons (each lasting two months) between 1983 and 1987, forms part of this development (Mordant, 1985, 1992a and 2006). This open-air site, comprised of five main loci totalling nearly 1,000 m², was spread across an exposed area of approximately 3 hectares. Its discovery came as a surprise as what was expected to be found, based on work carried out since 1970, was not a Mesolithic site, but the extension of a fortified Middle Neolithic occupation (fig. 1, A) in the form of peripheral refuse dumps preserved in a waterlogged context. The installation of a gravel quarry following excavations in 1981 that required significantly lowering the groundwater table by pumping water into a drainage reservoir eventually allowed the eastern zone of warped paleochannels to be investigated. These paleochannels served as a natural boundary of the Neolithic occupations. The objective had been to reach the Neolithic deposits, expected to be found approximately 2 m below

the water table, as this had failed during prior attempts. Beginning in 1982, wide mechanically dug test trenches (up to -3m) were placed at the limits of the Neolithic site exposing a substantial stratigraphy above the water line. Peat deposits at the base of a channel were overlain by fine sterile grey sands, followed by light carbonated silts—the latter unfortunately yielded only occasional Neolithic remains. The interesting presence of "faunal remains and several atypical flakes" was however noted in an erosion layer related to the bank and edge of the peat deposit. The continuation of the project the following year confirmed this presence beyond all expectations with the discovery of whole deer and wild boar skulls. After a period of incertitude regarding the age of these deposits, in 1984 the ¹⁴C verdict was returned—we were in the middle of the 8th millennium!

The obvious potential of the site and support from the Laboratory of Comparative Anatomy at the National Natural History Museum allowed us to mobilise, from 1984 onwards, a team of 21 young researchers, most of whom were without posts, and carry out a volunteer excavation. This work formed part of a CNRS research project (1985–1987) coordinated by Marie-Christine Marinval-Vigne and Daniel Mordant entitled "Archaeology

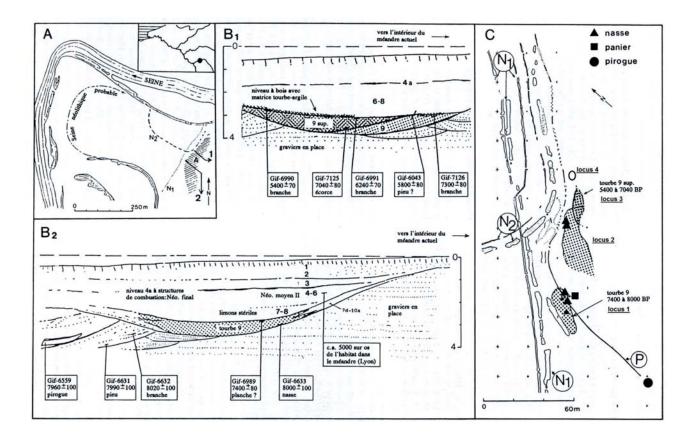


Fig. 1 – The site of Noyen-sur-Seine (Seine-et-Marne). A: Neolithic occupations; B1–B2: schematic stratigraphy of Mesolithic systems 9 and 9 sup; C: excavation loci 1 to 4 (N1–N2: Neolithic fortifications; P: Protohistoric palisade) after Mordant, 1992a.

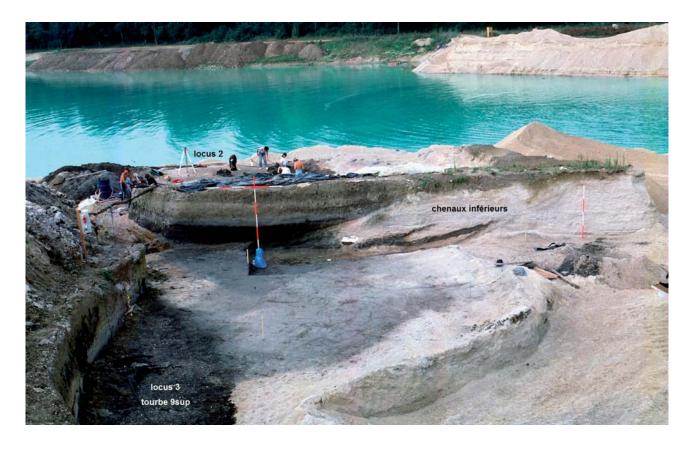


Fig. 2 – Noyen-sur-Seine. View towards the south of the excavations in 1985: foreground, locus 3 before the excavations; background, locus 2 at the end of excavations (photo D. Mordant).

and Fluvial Environments from the Mesolithic to Protohistory based on the investigation of waterlogged deposits at Noyen-sur-Seine (Seine-et-Marne)". Various presentations at national (Mordant and Mordant, 1989; Marinval-Vigne et al., 1991 and 1993; Mordant, 1991) and international (Mordant and Mordant, 1992) conferences, followed by several publications and different academic work (Dauphin, 1989; Auboire, 1991) between 1987 and 1992 (1), highlighted the richness, excellent preservation and diversity of the excavated material. This fluviatile environment, accessible from the Preboreal onwards, is documented in an over 4 m deep stratigraphy, including nearly 1 m of peat deposits, which yielded more than 7,000 osseous remains referable to both hunting and fishing, worked objects in bone and wood (including a dugout canoe), evidence of wickerwork (fig. 3; Mordant, 1992b; Leclerc, 2004), human remains (Auboire, 1991), as well as a sparse and 'atypical' lithic industry.

NEW STUDIES (D. M.)

Initial studies, coupled with the wickerwork reconstructions carried out up until 2004 with the help of Guy Barbier's experimental basket-weaving at the Nemours Museum of Prehistory (Leclerc, 2004, p. 30–32), have focused on environmental questions (Leroyer, 1997; the work of V. Bernard and P. Rodriguez) and on the exploitation of more novel materials, especially vegetal remains that required careful conservation in what used to be relatively precarious conditions (Mordant, 1997). The lithic industry initially studied by A. Augereau (1989) forms the main point of reference for the Mesolithic period. Despite a program of wet sieving that resulted in the thorough recovery of fish remains (Dauphin, 1989), very few microliths were recorded. É. David studied the organic industry during her doctoral research (David, 1999).

Returning to Noven after 25 years is not at all designed to highlight any particular oversights in this pioneering research, nor rewrite it, but rather to revisit the dynamics underlying the taphonomy and chronology of the deposits which must begin from exhaustively recorded field data (hand-drawn 1:10 plans with an inventory, systematic recording of levels, wet sieving of the anthropic levels). In parallel, it is necessary to re-examine the assemblages whose potential has not yet been fully explored and, in all cases, update this new approach based on results from recent Mesolithic research, especially those from rescue archaeology. The 'atypical' qualifier that remains attached to this site since its discovery is brought into question by this new approach. By attempting to compensate for and explain its shortcomings via different comparative studies (e.g. lithic material), as well as exploiting as best as possible its genuine assets, the site of Haut-des-Nachères at Noyen-sur-Seine could possibly be considered as any other Mesolithic site. This ought to lead to a rewarding research dynamic that will enrich our understanding of the period which witnessed the emergence of the Neolithic at the end of the 6th millennium BC.

TAPHONOMY AND CHRONOLOGY OF THE DEPOSITS (D.M.)

The Mesolithic occupations were identified in paleochannels at the western edges of a sandy-gravelly dome. Various Neolithic occupations overlaying these deposits across nearly 8 ha were also investigated: two distinct ditched embankment systems, as well as a dense, exceptionally well-preserved and structured (2) occupation level excavated over 10,000 m² (Mordant, 1977). The level was found on a thin bed of carbonated silt (averaging between .10 and .15 m) sealed by another more or less eroded silty bed (.20 m maximum) just below the plough-level.

The Mesolithic material was found in four 25 to 300 m² depressions with peaty bases³ spread across several hundred square meters along the SW-NE oriented bank. Two topo-chronological systems could be discerned (fig. 4: loci 1-4): the oldest one to the south (system 9), radiocarbon dated (wood) to between 8000 and 7300 uncal. BP (7190 and 5970 cal. BC) and attributed to the Middle Mesolithic, and the most recent to the north, (system 9 sup) dated to between 7000 and 6200 uncal. BP (6060 and 4995 cal. BC) and assigned to the Late/ Final Mesolithic with Montbani bladelets. The more or less fragmented material, representing butchery activities or the production and use of flint tools, was recovered from gravel beds connected to the bank's erosion or from nearly 1 m thick peat deposits at the base of the channel. This material derives from human occupations whose traces have been totally erased by erosion, but were probably higher up on the sandy-gravelly dome (4). Significant Mesolithic traces were not identified away from this bank despite careful investigations of the area after its exposure, nor on the dome to the west or to the east in the paleochannels.

The earliest, essentially un-preserved, occupations are without doubt slightly older than 8000 uncal. BP and correspond to the dugout pine canoe found 65 m to the south (fig. 1, C) and refuse scattered by floodwaters and dispersed within channels infilled with reworked gravels and possibly residual peat lenses. On the other hand, the terminal Boreal and Early Atlantic occupations are associated with a generally more low-energy sedimentation phase during which substantial peat deposits developed over a period on the order of 500 years, without major local erosion or a phase of raised water levels. However, the occupations, especially in the more northern loci, seemed to have suffered significant sedimentary reworking during the Atlantic period. Throughout the ensuing Neolithic period, the infilling of the eastern paleochannels involved an important carbonated mud component resulting from the considerable erosion of the catchment



Fig. 3 – Noyen-sur-Seine. Lower channels (A, B and D) and locus 1, peat 9 (C, E to H): objects made from vegetal material. A-B: dugout canoe, *Pinus sylvestris*, L preserved = 4 m, with detail of the end with a burnt platform (container for a hearth?); C to F: wicker fish traps with funnelled openings and privet openwork, reconstructed diameters: 30 to 36 cm; maximum length: 87 cm; G and H: hemispherical woven willow container – *Salix sp.*, reconstructed diameter approximately 20 cm (A, C and H: photos D. Mordant; B: photo CNRAS).

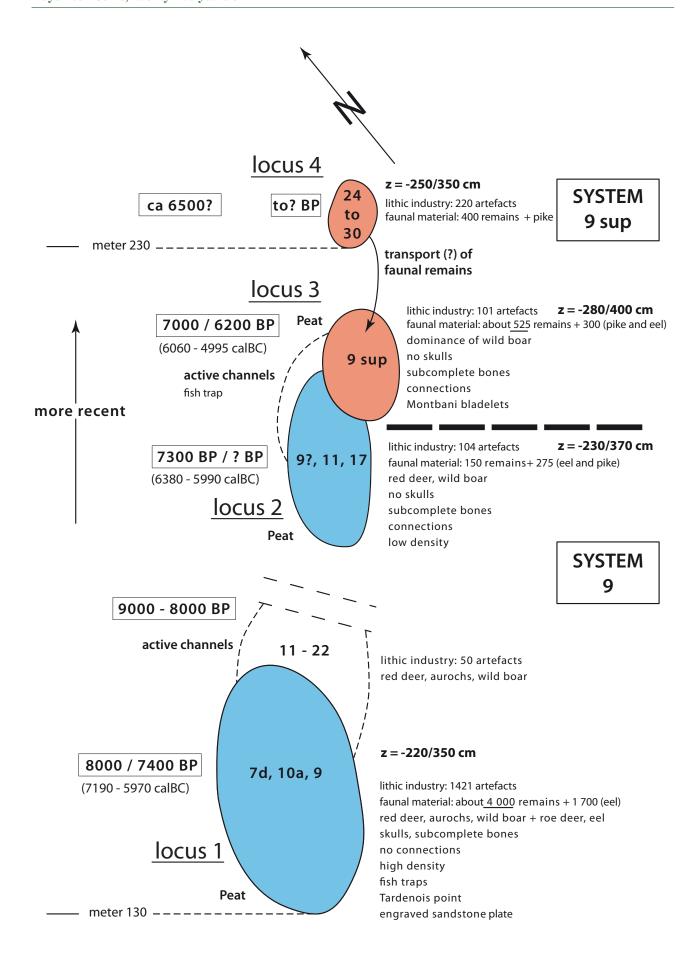


Fig. 4 – Noyen-sur-Seine. General plan of the excavated Mesolithic loci.



Fig. 5 – Noyen-sur-Seine. Locus 3, system 9 sup: discard cone of wild boar remains (photo D. Mordant).



Fig. 6 – Noyen-sur-Seine. Locus 1, system 9: the bank during excavations (photo D. Mordant).



Fig. 7 – Noyen-sur-Seine. Locus 1, system 9: wild boar skull (photo D. Mordant).



Fig. 8 – Noyen-sur-Seine. Locus 4, system 9 sup.: accumulation of young wild boar remains (photo D. Mordant).

The most salient information concerning the different loci is summarized in figure 4. The nature and distribution of the remains is the product of various human activities spread over close to two millennia that took place on the site or, in some cases, within the fluvial environment. These far from ideal conditions for a fine-grained spatio-temporal analysis should be approached with caution. We observe: 1) refuse in a near primary position associated with the remains of wild boar in locus 3 (system 9 sup, fig. 5); 2) accumulations of fragmented bone remains and, to a lesser extent, lithic artefacts in locus 1 (system 9) probably connected to the bank's erosion (fig. 6) and could therefore result from the displacement of an occupation level located above this bank; 3) skulls of large game (wild boar, red deer, roe deer), absent elsewhere, were also noted in this locus (fig. 7); 4) an accumulation of wild boar remains, some probably in a secondary context, associated with an organic clay lens in locus 4 (fig. 8); 5) the possible human or natural transport between loci 3 and 4 (separated by 20 m) of the remains of an old stricken wild boar (based on the work of J.-D. Vigne, followed by A. Augereau and A. Bridault); 6) finally, the clear dominance of complete bones

in all three loci to the north of locus 1, including locus 2 found in system 9. Furthermore, two canid skulls (Vigne and Marinval-Vigne, 1988) come from locus 1 (system 9) with a third identified amongst the remains of young wild boar in locus 4.

Wickerwork remains (fig. 2) were found solely in system 9 and include a fragment of a fish trap from the top of the peat in locus 1, together with three other fragments and a tightly woven piece (a basket?) found at its base. Two wickerwork fragments were also associated with the paleochannels at the base of locus 2. Bi-pointed shanks (straight hooks?) were also present at the top of the peat in locus 3 associated with Montbani bladelets and a Sonchamp-type microlith.

STATE OF RESEARCH AND ANTHROPO-ZOOLOGICAL QUESTIONS (J.-D. V.)

The rich collection of 7,200 vertebrate remains (of which 5,350 are identifiable) recovered from the peat deposits of Haut-des-Nachères at Noyen-sur-Seine

constitutes an important reference collection, remarkable not only for the its state of preservation, but also for the care in which it was collected (significant volumes of wet-sieved sediment). With the exception of the gravelly levels that yielded less than 5% of the assemblage, the large fauna is characterised by a very low level of post-depositional fragmentation. Their rapid immersion and burial also protected them from damage normally inflicted by carnivores. The site has produced important anatomical assemblages of even the most fragile skeletal elements such as the skull, cervid antler tips, scapulae, ribs and vertebrae (fig. 9). Traces of even the most subtle human actions (projectile impact, scratching, disarticulation, skinning, cooking: fig. 10) are also preserved. The fauna from the peat deposits of Noyen has been the object of a detailed archeozoological study led by one of us (J.-D. V.), which resulted in a still unpublished inventory, as well as numerous more specific studies that remain only partially published.

The first publication dealt with the skulls of two large canids (*Canus lupus*: fig. 11), including morphological features resulting from life in captivity (Vigne and Marinval-Vigne, 1988), an interpretation that has been reinforced by a recent revision. These elements could provide evidence for the local domestication of wolf during the Mesolithic, significantly after the first Palaeolithic domestications gave birth to "Upper Paleolithic small domestic dogs in Southwestern Europe" (Pionnier-Capitan *et al.*, 2011).

The second published study concerned 2,235 fish remains collected from the wet sieved sediments of three loci during the 1983–1985 field seasons (Dauphin, 1989). The combination of their very disparate spatial distribution, the overwhelming dominance of a limited number of species (notably pike, Esox lucius, and eel, Anguilla anguilla) and a high proportion of burnt pieces leaves no doubt as to the anthropic origin of this ichtyofauna. Eels dominate the deposits from loci 1 and 2 (Middle Mesolithic) forming 93% and 69%, receptively, of the faunal material, a fact consistent with the recovery of fish traps from these sectors. In locus 3, dated to the Late/Final Mesolithic, pike represents 60% of the fish remains. The fishing season was centred around the summer months, especially in loci 2 and 3 where osteological remains seem to correlate with only a small number of fishing epi-

In the absence of a more secure chrono-stratigraphic sequence, the analytical data from the study of the large fauna has been the subject of only preliminary presentations (Marinval-Vigne *et al.*, 1991 and 1993).

During the seemingly year-round Middle Mesolithic occupations, red deer (Cervus elaphus) was the main prey species, representing 56% of the meat-weight, followed by aurochs (Bos primigenius) and wild boar (Sus scrofa). Roe deer (Capreolus capreolus) is also relatively abundant (19% of the remains). Game was principally pursued in the forest and at its edges, but also to a lesser extent from the river. Deer mortality profiles demonstrate a selective slaughter focused on adults, probably related to hunting

from a hide in relatively enclosed forested environments rich in game (Vigne, 2000). The *chaîne opératoire* of deer carcass processing, largely carried out with stone hammers, could be reconstructed from use-wear analysis carried out on nearly 600 specimens together with experiments involving modern red deer (Vigne, 2005).

Patterns of Late/Final Mesolithic faunal remains depart significantly from those of the Middle Mesolithic as wild boar come to represent 70% of the prey signals (fig. 12). Seasonality data is consistent with the results obtained from fish remains in the same deposits and indicates a small number of temporally specific hunting episodes most likely situated at the end of the summer (Vigne et al., 2000). Hunting practices targeted females with their young (fig. 9, C). Significant differences in carcass processing chaînes opératoires and culinary practices from Middle Mesolithic patterns can only be partially explained by differences in sought-after products. The hunters of the 9 sup levels probably aimed to set aside quarters of meat and fat stores as suggested, respectively, by the absence of hind leg bones from young individuals in loci 24-26 and the unusual and systematic perforation of long bone diaphyses by pecking (fig. 9, C and fig. 10, C). These differences undoubtedly also have a cultural dimension, as can be seen in the different ways in which wild boar extremities were processed; by sawing and bending-breaking during the Middle Mesolithic (fig. 10, E) and by traditional percussion methods in the Late/Final Mesolithic. The possibility of contamination or the lack of a sufficiently refined stratigraphic interpretation notwithstanding, several domesticated bovid remains, apparently associated with the Final/Late Mesolithic deposits, could suggest contact between these groups of hunters and initial 'linear band ceramic' societies.

During the 1990s and 2000s, faunal assemblages from the Noyen peat deposits were used as an osteometric reference collection by numerous researchers (e.g. Bridault, 1993; Tresset, 1996; Albarella et al., 2009). They have also been sampled for DNA analysis in order to disentangle the origins of European domestic bovids (Edwards et al., 2004 and 2007), pigs (Larson et al., 2007) and dogs (Pionnier-Capitan et al., 2011).

Once the critical re-evaluation of field data concerning the site's stratigraphy is complete, the numerous forms of zooarchaeological data recovered from these exceptional collections ought to be the subject of an exhaustive publication in the near future.

NOYEN, A SPECIALISED SITE? NEW PERSPECTIVES (B. V.)

Since 2008, one of us (D. M.) has coordinated new work at Noyen in the framework of a collaborative research project entitled "The Final Palaeolithic and Mesolithic of the Paris Basin and its margins..." (French Ministry of Culture).

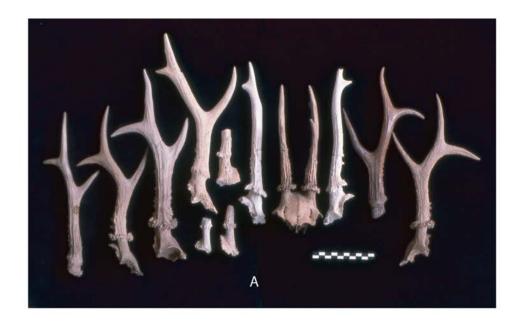






Fig. 9 – Noyen-sur-Seine. A: locus 1, levels 7d, 9 and 10a (Middle Mesolithic), roe deer antlers; B: level 9 sup (Final Mesolithic), sub-complete wild boar scapulae; C: locus 3, level 9 sup (Final Mesolithic), series of right (top line) and left tibias classed from left to right by decreasing order of age (photos and graphics J.-D. Vigne).

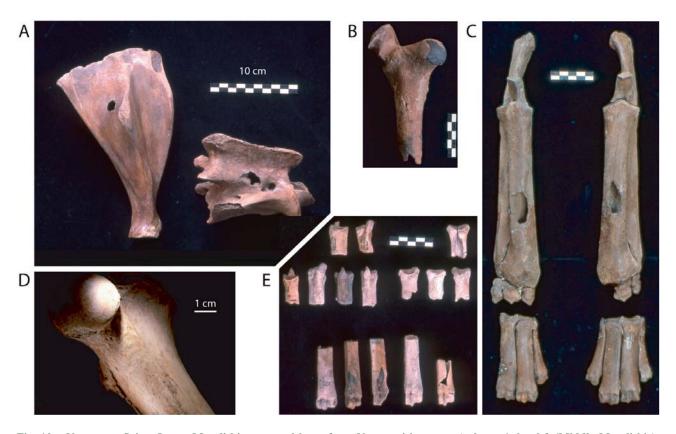


Fig. 10 – Noyen-sur-Seine. Large Mesolithic mammal bone from Noyen with traces. A: locus 1, level 9 (Middle Mesolithic), projectile impacts on the right scapula of a wild boar and on a deer axis; B: locus 3, level 9 sup. (Final Mesolithic), cooking marks on the articular condyle of a red deer left femur; C: locus 3, level 9 sup (Final Mesolithic), forearm bones and the right and left feet of the same adult wild boar, the dorsal face of a radius shaft was perforated by pecking for marrow extraction; D: locus 1, level 9 (Middle Mesolithic), traces of disarticulation/de-fleshing on the cranio-medial surface of a complete wolf femur; E: locus 1, levels 7d, 9, and 10a (Middle Mesolithic), series of proximal halves (the two top lines) and distal wild boar axial metapodials sawed at the mid-shaft during processing and for accessing marrow (photos and graphics J.-D. Vigne).

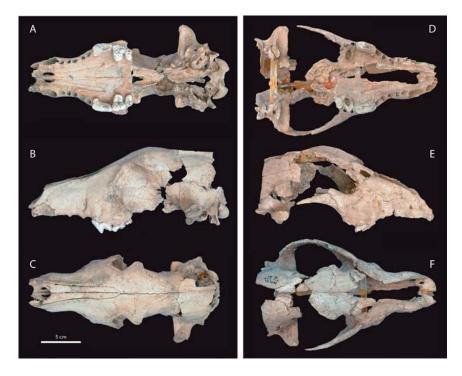


Fig. 11 – Noyen-sur-Seine. Locus 1, level 9, Middle Mesolithic (A, B, C: squares G137-119; D, E, F: squares D149-10). Ventral (A, D), lateral (B, E) and dorsal (C, F) views of the two wolf skulls (*Canis lupus*). NB: a resin and plexiglass support had to be inserted within the cranium of the second specimen in order to consolidate it (restoration and graphics J.-D. Vigne; photos K. Debue, CNRS).

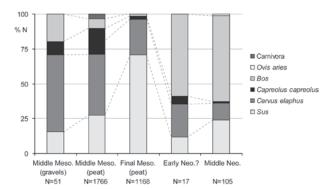


Fig. 12 – Noyen-sur-Seine. Relative frequencies (in number of identified specimens: NISP) for the main large mammal groups in the five major chrono-stratigraphic deposits from Noyen.

Following an initial study carried out by G. Auboire (1991), G. Bosset has re-examined the human remains from an archeo-thanatological perspective (5). F. Valentin and D. Drucker have also been interested in a project studying the diets of Mesolithic populations based on the analysis of bucco-dental lesions and stable isotopes (Valentin and Drucker, 2009) in order to evaluate the contribution of aquatic resources.

We have also examined the lithic industry in order to better understand the specialised—or not—character of the human occupations at Noyen. Only several preliminary results from the terminal Boreal levels (locus 1) will be developed here.

Use-wear analysis has identified a varied functional spectrum, including significant working of vegetal materials, whose relative diversity suggests multi-functional occupations: Guéret, this volume (6).

Following on from Augereau's initial observations (Augereau, 1989), this multi-functional aspect can also be deduced from the lithic reduction sequences, particularly in respect to the cores. Level 9 of locus 1 has yielded around 50 cores where at least the final debitage objective is clear for around 40 of them, as refitting has not yet been attempted (fig. 13). Scar negatives indicate the principal intention during the last sequences to be the production of thin, short and elongated pieces having at least one rectilinear edge, in other words, bladelets (*stricto* and *lato*

Objectiv	es	N
Bladelets	3	30
Flakes	Thick and large	3
	Thin and small	8
Impossible to decipher (either due to an early abandon, or a lack of skill or an heat deterioration)		8
Total		49

Fig. 13 – Noyen-sur-Seine. Locus 1, level 9: cores classed by final principal production objective (after B. Valentin).

sensu) normally reserved for the manufacture of microliths during this period (fig. 14). In addition, debitage was geared towards the simple production of flakes. Several of these generally thick large flakes (with a maximum dimension between 40 to 50 mm) were intentionally retouched. Smaller, thinner products (20 to 30 mm) are also present and are comparable with the negatives found on cores recovered from the Mesolithic site of 62 rue Henry-Farman in Paris, particularly those from loci 3 and 4 (fig. 15).

Overall, the cores from Noyen are generally similar to those known from other Boreal open-air sites where debitage focused on the production of microlith blanks, but also flakes which are currently being analysed for use-wear. The main debitage systems detectable through cores do not directly portray any clear economic character for Noyen.

Products issuing from bladelet cores *sensu lato* are significantly under-represented. In fact, the 'fine fraction' is proportionally extremely low despite sediments from the anthropic levels being systematically sieved. Could this result from the gravitational sorting of refuse from the bank's edge? In addition to this taphonomic process, can the human selection of larger pieces, especially cores, be responsible for their over-representation in this apparently peripheral zone of the occupation? It is therefore essential that we better understand the particular function of the excavated area before we discuss the overall status of the site. This requires a phase by phase analysis of this refuse which clearly represents successive depositional



Fig. 14 – Noyen-sur-Seine. Locus 1, level 9: bladelet cores (photos S. Griselin).



Fig. 15 - Noyen-sur-Seine. Locus 1, level 9: flake cores (photos S. Griselin).

episodes, especially new comparisons with zooarchaeological data. Are the differential distributions seen with the lithic remains identical for the faunal material?

There exists at least one other opportunity for a more large-scale inter-site comparison to explain an apparent anomaly; the fact that in level 9 only 2 microliths were recovered from the 1,500 lithics. Can this lack of microliths and the general under-representation of the fine fraction be put down to the fact that they derive from refuse at the occupation's periphery? Other factors may be at play as L. Chesnaux (this volume) and other researchers have demonstrated by experimentation—a significant number of microliths detach and remain within prey upon impact. Can the fact that so few microliths are associated with carcasses in level 9 also be due to the fact that bone points, such as those recovered from the Early Mesolithic level 9 sup, were used during this period (David, 1999)? However, no points of this kind were present in level 9 and, in any case, this would represent a novel example of hunting without microliths during this period. And why, if this were indeed the case, would bladelet production have taken place at all on the site? J.-D. Vigne's study of the material from level 9 (Vigne, 2005) suggests another possibility; that meat was boiled and when the flesh disintegrated numerous used microliths would have remained where the kill had been prepared and or consumed. Addressing this issue requires a detailed examination of microlith distributions on other sites. While it is clear that microliths are very often found in proximity to hearths, is this simply because arrows were rearmed in their vicinity or can their presence also designate cooking areas?

This line of questioning, amongst many other possibilities, underlines the usefulness of re-evaluating the studies from Noyen, particularly as increased excavations of Mesolithic occupations have failed to produce comparable zones. For this reason, Noyen remains *unequaled*, but no longer appears so *atypical*. In this respect it can be considered as a reference site, in other words, an ideal location for formulating certain hypotheses (e.g. the spatial distribution of used microliths) or for testing those

developed elsewhere (e.g. the importance of working vegetal matter: Guéret, this volume).

NOTES

- (1) Main researchers involved in the study of the site between 1985 and 1992: Guy Auboire, Anne Augereau, Salvator Bailon, Anne Bridault, Vincent Bernard, Marie-Agnès Courty, Éva David, Charles Dauphin, Georgette Delibrias, Vincent Krier, Georges Lambert, Chantal Leroyer, Philippe Marinval, Marie-Christine Marinval-Vigne, Claude Mordant, Daniel Mordant, Patrice Rodriguez, Jean-Denis Vigne, Philippe Vilette.
- (2) Possible residual Mesolithic pieces, although small in number, have been noted amongst the Neolithic remains.
- (3) Sedimentary units were initially numbered from 1 to 10 based on the reference profile from locus 1 and then up until 30 (locus 4): the peats 9 (locus 1) and 9 sup (locus 3) served as a reference for designating the two main chrono-topographic assemblages during this preliminary phase of study (system 9 and system 9 sup).
- (4) Remains of a hearth were observed. Erosion also affected the Neolithic occupation level, although it was not preserved in this sector.
- (5) PhD project in progress at Paris I under the direction of B. Valentin and F. Valentin: *Mesolithic Funerary Practices in France: An archeo-anthropological reexamination and sociological interpretation.*
- (6) PhD project in progress at Paris I under the direction of B.Valentin: The Mesolithic of Northern France in its European Context (X-VI Millenia BC). Activities, mobility and economy: a functional approach to stone tool kits.

REFERENCES

- Albarella U., Dobney K., Rowley-Conwy P. (2009) Size and Shape of the Eurasian Wild Boar (Sus scrofa), with a View to the Reconstruction of its Holocene History, Environmental Archaeology, 14, 2, p. 103–136.
- AUBOIRE G. (1991) Les restes humains mésolithiques de Noyen-sur-Seine (Seine-et-Marne, France), *L'Anthropologie*, 95, 1, p. 229–236.
- AUGEREAU A. (1989) L'industrie lithique de Noyen-sur-Seine : présentation de l'outillage, in *L'homme et l'eau au temps de la Préhistoire*, proceedings of the 112th Congrès national des sociétés savantes (Lyon, 1987), Paris, CTHS, p. 191–202.
- Bridault A. (1993) Les économies de chasse épipaléolithiques et mésolithiques du Nord et de l'Est de la France, PhD thesis, Université Paris 10 Nanterre, 308 p.
- DAUPHIN C. (1989) L'ichtyofaune de Noyen-sur-Seine, in *L'homme et l'eau au temps de la Préhistoire*, proceedings of the 112th Congrès national des sociétés savantes (Lyon, 1987), Paris, CTHS, p. 11–32.
- David É. (1999) L'industrie en matières dures animales du Mésolithique ancien et moyen en Europe du Nord. Contribution de l'analyse technologique à la définition du Maglemosien, PhD thesis, Université Paris 10 Nanterre, 770 p.
- EDWARDS C. J., MACHUGH D. E., DOBNEY K.M., MARTIN L., RUSSEL N., HORWITZ L.K., MCINTOSH S.K., MACDONALD K.C., HELMER D., TRESSET A., VIGNE J.-D., BRADLEY D.G. (2004) Ancient DNA Analysis of 101 Cattle Remains: Limits and Prospects, *Journal of Archaeological Science*, 31, p. 695–710.
- EDWARDS C. J., BOLLONGINO R., SCHEU A., CHAMBERLAIN A., TRESSET A., VIGNE J.-D., BAIRD J. F., LARSON G., HEUPIN T. H., HO S. Y. W., SHAPIRO B., CZERWINSKI P., FREEMAN A. R., ARBOGAST R.-M., ARNDT B., BARTOSIEWICZ L., BENECKE N., BUDJA M., CHAIX L., CHOYKE A. M., COQUEUGNIOT E., DÖHLE H.-J., GÖLDNER H., HARTZ S., HELMER D., HERZIG B., HONGO H., MASHKOUR M., ÖZDOGAN M., PUCHER E., ROTH G., SCHADE-LINDIG S., SCHMÖLCKE U., SCHULTING R., STEPHAN E., UERPMANN H.-P., VÖRÖS I., BRADLEY D. G., BURGER J. (2007) Mitochondrial DNA Analysis Shows a Near Eastern Neolithic Origin for Domestic Cattle and no Indication of Domestication of European Aurochs, *Proceedings of the Royal Society*, B, 274, p. 1377–1385.
- LECLERC A.-S. (2004) *La vannerie dans l'Antiquité*, exhibition catalog, Nemours, Musée de Préhistoire d'Île-de-France, 59 p. [Noyen's basketry, p. 16 & 30–32].
- Leroyer C. (1997) L'Homme, climat, végétation au Tardi- et Postglaciaire dans le Bassin parisien : apports de l'étude palynologique des fonds de vallée, PhD thesis, Université Paris I – Panthéon-Sorbonne, 2 vols., 786 p.
- Marinval-Vigne M.-C., Mordant D., Auboire G., Augereau A., Bailon S., Dauphin C., Delibrias G., Krier V., Leclerc A.-S., Leroyer C., Marinval P., Mordant C., Rodriguez P., Vilette, P., Vigne J.-D. (1991) Noyen-sur-Seine, site stratiphié en milieu fluvia-

- tile : une étude multidisciplinaire intégrée, in J.-D. Vigne, M. Menu, C. Perlès & H. Valladas (eds.), *Du terrain au laboratoire : pour un meilleur dialogue en archéologie*, proceedings of the SPF-GMPCA session at the Congrès préhistorique de France (Paris, 1989) = *Bulletin de la Société préhistorique française*, 86, 10–12, p. 370–379.
- MARINVAL-VIGNE M.-C. MORDANT D. KRIER V., LEROYER C. RODRIGUEZ P., VIGNE J.-D. AVEC LA COLL. DE AUBOIRE G., AUGEREAU A., BAILON S., COURTY M.-A., DAUPHIN C., DELIBRIAS G., LAMBERT, G., LECLERC A.-S., MARINVAL P., MORDANT C., VILETTE P. (1993) Archéologie et paléoenvironnement : Noyen-sur-Seine (Seine-et-Marne), in *Paléoenvironnement et actualités*, proceedings of the Journées archéologiques d'Île-de-France (Meaux, 16–17 March 1991) Melun, Groupement archéologique de Seine-et-Marne (Mémoires, 1), p. 21–36.
- MORDANT C., MORDANT D. (1989) Noyen-sur-Seine, site mésolithique en milieu humide fluviatile, in *L'homme et l'eau au temps de la Préhistoire*, proceedings of the 112th Congrès national des sociétés savantes (Lyon, 1987), Paris, CTHS, p. 33–52.
- MORDANT C., MORDANT D. (1992) Noyen-sur-Seine: a Mesolithic Waterside Settlement, in B. Coles (éd.), *The Wetland Revolution in Prehistory*, proceedings of the conference (University of Exeter, April 1991), London, The Prehistoric Society & Exeter, WARP, p. 55–64.
- MORDANT D. (1977) Noyen-sur-Seine, habitat néolithique de fond de vallée alluviale, I. Étude archéologique, *Gallia Préhistoire*, 20, 1, p. 229–269.
- MORDANT D. (1985) Pour l'archéologie en milieu fluvial, *Bulletin de la Société préhistorique française*, 82, 3, p. 70–72.
- MORDANT D. (1991) Intégrer les différentes images de l'environnement dans l'espace et le temps en milieu fluviatile. L'exemple de la Petite-Seine, in J.-D. Vigne, M. Menu, C. Perlès & H. Valladas (eds.), Du terrain au laboratoire : pour un meilleur dialogue en archéologie, proceedings of the SPF-GMPCA session at the Congrès préhistorique de France (Paris, 1989) = Bulletin de la Société préhistorique française, 86, 10–12, p. 316–321.
- MORDANT D. (1992a) Noyen-sur-Seine avant le Néolithique : des vestiges mésolithiques en milieu humide, *Bulletin du Groupement archéologique de Seine-et-Marne*, 28–31, p. 17–38.
- MORDANT D. (1992b) À la recherche des vanniers de la Préhistoire, *in* E. Baron (ed.), *Osier, vannier, panier*, Saint-Cyrsur-Morin, Musée des Pays de Seine-et-Marne, p. 11–26.
- MORDANT D. (1997) Les objets en bois gorgés d'eau découverts en contexte d'urgence : problèmes de conservation et de prélèvement. Deux exemples : les vanneries mésolithiques et la pirogue carolingienne de Noyen-sur-Seine (77), in *Actes des XIII*^e *Journées des restaurateurs en archéologie* (Versailles, 12–13 June 1997), Paris, ARAAFU (Cahier technique de l'ARAAFU, 3), p. 25–30.

- MORDANT D. (2006) Une fouille terrestre en milieu fluvial *in* A. Dumont (ed.), *Archéologie des lacs et des cours d'eau*, Paris, Errance (Archéologiques), p. 51–53.
- PIONNIER-CAPITAN M., BEMILLI C., BODU P., CELERIER G., FERRIÉ J.-G., FOSSE P., GARCIA M., VIGNE J.-D. (2011) New Evidence for Upper Palaeolithic Small Domestic Dogs in South Western Europe, *Journal of Archaeological Science*, 38, 9, p. 2123–2140.
- Tresset A. (1996) Le rôle des relations homme/animal dans l'évolution économique et culturelle des sociétés des Ve-VI° millénaires en Bassin parisien, PhD thesis, Université Paris 1 Panthéon-Sorbonne, 382 p.
- VALENTIN F., DRUCKER D. (2009) Stratégies de subsistance mésolithiques en Île-de-France et région Centre : une analyse paléobiologique et isotopique, in B. Valentin (ed.), Paléolithique final et Mésolithique dans le Bassin parisien et ses marges. Habitats, sociétés et environnements, rapport de projet collectif de recherche, UMR 7041, Orléans, Service régional de l'Archéologie du Centre, p. 175–188. http://lara.inist.fr/handle/2332/1610.
- VIGNE J.-D. (2000) Outils pour restituer les stratégies de chasse au cerf en Europe au Mésolithique et au Néolithique : analyses graphiques, statistiques et multivariées de courbes d'âges d'abattage, in B. Bassano, G. Giacobini &V. Peracino (eds.), La gestion démographique des animaux à travers le temps Animal management and demography through the ages, proceedings of the 6th International Conference held by the association « L'Homme et l'Animal. Société de recherche interdisciplinaire » (Torino, 1998), Ibex J. Mt Ecol., 5 Anthropozoologica, 31, p. 57–67.
- VIGNE J.-D. (2005) Découpe du cerf (Cervus elaphus) au Mésolithique moyen, à Noyen-sur-Seine (Seine-et-Marne) : analyses tracéologique et expérimentale, in J. Desse, N. Desse-Berset, P. Méniel & J. Studer (éds.), Volume d'hommages à Louis Chaix, Genève, Museum d'histroire naturelle (Revue de Paléobiologie, special issue 10), p. 69–82.

- VIGNE J.-D., MARINVAL-VIGNE M.-C. (1988) Quelques réflexions préliminaires sur les Canidés mésolithiques de Noyen-sur-Seine (France) et sur la domestication du chien en Europe occidentale, *Archaeozoologia*, 2, 1–2, p. 153–164.
- VIGNE J.-.D., BRIDAULT A., HORARD-HERBIN M.-P., PELLÉ E., FIQUET P., MASHKOUR M. (2000) Wild boar (Sus scrofa L.) Age at Death Estimates: the Relevance of New Modern Data for Archaeological Skeletal Material.

 2. Shaft Growth in Length and Breadth. Archaeological Application, in B. Bassano, G. Giacobini et V. Peracino (dir.), La gestion démographique des animaux à travers le temps Animal management and demography through the ages, proceedings of the 6th International Conference held by the association « L'Homme et l'Animal. Société de recherche interdisciplinaire » (Torino, 1998), Ibex J. Mt Ecol., 5 Anthropozoologica, 31, p. 19–27.

Daniel Mordant

Honorary Curator of Cultural Heritage mordant.daniel@wanadoo.fr

Boris Valentin

UMR 7041 « Ethnologie préhistorique » Université Paris 1 3 rue Michelet, F-75006 Paris, France valentin@univ-paris1.fr

Jean-Denis Vigne UMR 7209. CNRS

Muséum national d'histoire naturelle Dép. Écologie et gestion de la biodiversité, CP 56, 55 rue Buffon, F-75005 Paris, France vigne@mnhn.fr.



MESOLITHIC PALETHNOGRAPHY

RESEARCH ON OPEN-AIR SITES BETWEEN LOIRE AND NECKAR

Proceedings from the international round-table meeting in Paris (November 26–27, 2010) as part of sessions organised by the Société préhistorique française

Published under the direction of
Boris VALENTIN, Bénédicte SOUFFI, Thierry DUCROCQ,
Jean-Pierre FAGNART, Frédéric SÉARA, Christian VERJUX

'Mesolithic Palethnography...': part of this volume's title represents a sort of methodological and theoretical mission statement designed to convey the idea that research concerning the last hunter-collectors is today in desperate need of this type of insight. Since the beginning of the 1990s, a spectacular crop of occasionally vast open-air sites has emerged, one of the notable contributions of preventive archaeology. Several long-term excavations have also added to this exponentially increasing body of information that has now come to include a growing number of well-preserved sites that have allowed us to address palethnographic questions. This volume represents a first step towards revitalising Mesolithic research. Here we have focused on occupations from the 8th millennium cal BC, currently the best documented periods, and limited the scope to Northern France and certain neighbouring regions. The first part contains several preludes to monographs highlighting potential future studies as well as various patterns in the structuring of space and the location of camps. These, as well as other complementary discoveries, provide material for the second part of the volume dedicated to new data concerning the functional dynamics of Mesolithic camps.







ISBN 2-913745-51-2 (on-line) ISSN: 2263-3847

