

## 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.

Conformément 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 publications 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 adhérant 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	Zone €**	Hors zone €
Adhésion à la <i>Société préhistorique française</i> et abonnement au <i>Bulletin de la Société préhistorique française</i>		
▶ tarif réduit (premier abonnement, étudiants, moins de 26 ans, demandeurs d'emploi, membres de la Prehistoric Society***)	<input type="checkbox"/> 40 €	<input type="checkbox"/> 45 €
▶ abonnement / renouvellement	<input type="checkbox"/> 75 €	<input type="checkbox"/> 80 €
<b>OU</b>		
Abonnement au <i>Bulletin de la Société préhistorique française</i>		
▶ abonnement annuel (sans adhésion)	<input type="checkbox"/> 85 €	<input type="checkbox"/> 90 €
<b>OU</b>		
Adhésion à la <i>Société préhistorique française</i>		
▶ cotisation annuelle	<input type="checkbox"/> 25 €	<input type="checkbox"/> 25 €
2. PERSONNES MORALES		
Abonnement au <i>Bulletin de la Société préhistorique française</i>		
▶ associations archéologiques françaises	<input type="checkbox"/> 110 €	
▶ autres personnes morales	<input type="checkbox"/> 145 €	<input type="checkbox"/> 155 €
Adhésion à la <i>Société préhistorique française</i>		
▶ cotisation annuelle	<input type="checkbox"/> 25 €	<input type="checkbox"/> 25 €

NOM : ..... PRÉNOM : .....

ADRESSE COMPLÈTE : .....

TÉLÉPHONE : ..... DATE DE NAISSANCE : \_ \_ / \_ \_ / \_ \_ \_ \_

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 particulièrement :

.....

Date ....., signature :

Les chèques doivent être libellés au nom de la Société préhistorique française. Le paiement par **carte de crédit** est bienvenu (Visa, Mastercard et Eurocard) ainsi que le paiement par **virement** à La Banque Postale • Paris IDF centre financier • 11, rue Bourseul, 75900 Paris cedex 15, France • RIB : 20041 00001 0040644J020 86 • IBAN : FR 07 2004 1000 0100 4064 4J02 086 • BIC : PSSTFRPPPAR.

Toute réclamation d'un bulletin non reçu de l'abonnement en cours doit se faire au plus tard dans l'année qui suit. Merci de toujours envoyer une enveloppe timbrée (tarif en vigueur) avec vos coordonnées lorsque vous souhaitez recevoir un reçu fiscal et/ou une facture acquittée et/ou le timbre SPF de l'année en cours, et au besoin une nouvelle carte de membre.

N° de carte bancaire : \_ \_ \_ \_ \_

Cryptogramme (3 derniers chiffres) : \_ \_ \_ Date d'expiration : \_ \_ / \_ \_ signature :

\* : 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, Slovénie.

\*\*\* : 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](http://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](mailto:spf@prehistoire.org)  
Web site : [www.prehistoire.org](http://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

Boris VALENTIN, Bénédicte SOUFFI, Thierry DUCROCQ, Jean-Pierre FAGNART, Frédéric SÉARA and Christian VERJUX — <i>Introduction: Towards a mesolithic palethnology</i> .....	7
--	---

## 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 — <i>Mesolithic occupations on the edge of the Seine: spatial organisation and function of the site of 62 rue Henry-Farman, Paris (15th arrondissement)</i> .....	13
Daniel MORDANT, Boris VALENTIN and Jean-Denis VIGNE — <i>Noyen-sur-Seine, twenty-five years on</i> .....	37
Joël CONFALONIERI and Yann LE JEUNE — <i>The Mesolithic site of Haute-Île at Neuilly-sur-Marne (Seine-Saint-Denis): preliminary results</i> .....	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
Frédéric SÉARA and Olivier RONCIN — <i>Mesolithic valley floor occupations: the case of Dammartin-Marpain in the Jura</i> .....	93

## ELEMENTS OF PALETHNOGRAPHY: FUNCTIONAL DYNAMICS OF MESOLITHIC OPEN-AIR SITES

Lorène CHESNAUX — <i>Microliths from 62 rue Henry-Farman, Paris (15th arrondissement): specific arrows for different types of game hunted in particular places?</i> .....	119
Sylvain GRISELIN, Caroline HAMON and Guy BOULAY — <i>Manufacture and use of Montmorencian prismatic tools: the case of 62 rue Henry-Farman, Paris (15th arrondissement)</i> .....	133
Colas GUÉRET — <i>Character and variability of Early Mesolithic toolkits in Belgium and Northern France: the contribution of a functional approach</i> .....	147
Olivier BIGNON-LAU, Paule COUDRET, Jean-Pierre FAGNART and Bénédicte SOUFFI — <i>Preliminary data concerning the spatial organisation of Mesolithic remains from locus 295 of Saleux (Somme): a faunal perspective</i> .....	169
Thierry DUCROCQ — <i>The ‘Beuronian with crescents’ in Northern France: the beginnings of a palethnological approach</i> .....	189
Gabrielle BOSSET and Frédérique VALENTIN — <i>Mesolithic burial practices in the northern half of France: isolated burials and their spatial organisation</i> .....	207
Gunther NOENS — <i>Intrasite analysis of Early Mesolithic sites in Sandy Flanders: the case of Doel-“Deurganckdok J/L, C3”</i> .....	217
Philippe CROMBÉ, Joris SERGANT and Jeroen DE REU — <i>The use of radiocarbon dates in unraveling Mesolithic palimpsests: examples from the coversand area of North-West Belgium</i> .....	235
Claus Joachim KIND — <i>Tiny stones in the mud. The Mesolithic sites of Siebenlinden (Rottenburg, Baden-Württemberg, South West Germany)</i> .....	251





*Mesolithic Pale ethnography*  
*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. 169–187  
www.prehistoire.org  
ISSN 2263-3847 – ISBN 2-913745-51-2 (on-line)

*To the memory of Fabrice Nicolle and to his family*

## Preliminary data concerning the spatial organisation of Mesolithic remains from locus 295 of Saleux (Somme): a faunal perspective

Olivier BIGNON-LAU, Paule COUDRET, Jean-Pierre FAGNART and Bénédicte SOUFFI

**Abstract:** Locus 295 from Saleux is one of the best documented and preserved of the site. A Boreal peat covered the vestiges of this Mesolithic camp shortly after it was abandoned. Preservation conditions of the archaeological level and organic remains are thus ideal for reconstructing the space occupied by Mesolithic groups during the Boreal around 8500 BP (7550 calBC). The study of the spatial distribution of lithic artefacts, as well as several refits, compared with zooarchaeological analyses shed light on the internal organisation of space and the nature of the activities carried out on the site. Taken as a whole, this information suggests a relatively short occupation by a small human group whose main objective was the hunting of wild boar.

THE SITE of Saleux in the Somme Basin is especially well-known for its Lateglacial occupations attributed to the *Federmesser* tradition, one of which produced a skull of a *Homo sapiens sapiens* in 1998 (Fagnart, 1997; Coudret and Fagnart, 2004 and 2006). In parallel with work carried out on the Final Palaeolithic since 1993, ten Mesolithic occupations have also been studied (Fagnart et al., 2008). The spatial organisation of the Mesolithic remains from locus 295, excavated in 2003 and 2004, is the focus of this contribution given the excellent depositional and preservation conditions of the archaeological occupation, the legibility of the spatial organisation and well-preserved osseous remains.

### LOCATION AND STRATIGRAPHIC CONTEXT OF THE SITE OF SALEUX

The site of Saleux is found in the Selle Valley, one of the main affluents of the left bank of the Somme, some 6 kilometres south-west of Amiens and its confluence with the Somme (fig. 1). It is located on the lowest terrace of the Selle that borders the present river floodplain. Discovered at the beginning of the 1990's during

work prior to the construction of the A16 autoroute, an ongoing research excavation has been carried out since 1993 following an initial rescue operation. The site is in a key position as it lies on the border of the alluvial formations of the Selle Valley and the loamy slope deposits (fig. 2). Mesolithic occupations are found at the edge or in immediate proximity of a paleochannel that skirts the present alluvial plain and scatters into smaller well-defined loci over approximately 400 m (fig. 3, no. 1). The camps considered here occupy a gentle alluvial slope of the lowest terrace of the Selle and are therefore in a slightly higher topographic position in relation to the present alluvial plain. The other bank of the channel, which lies in an area liable to flooding, has not produced any archaeological traces. Unlike the majority of Mesolithic occupations studied from Saleux, locus 295 is found in a lower topographic position, immediately bordering the Holocene paleochannel. As a result, it was rapidly covered after its abandonment by organic deposits or Boreal age peats, followed by Atlantic calcareous tufa derived from the channel's infilling or warping of the alluvial plain (fig. 3, nos. 3 and 4). This rapid burial of remains tied to the very particular morphological position of the site resulted in the excellent preservation of the archaeological occupation, particularly the organic and osseous remains (fig. 3, nos. 5 to 7).

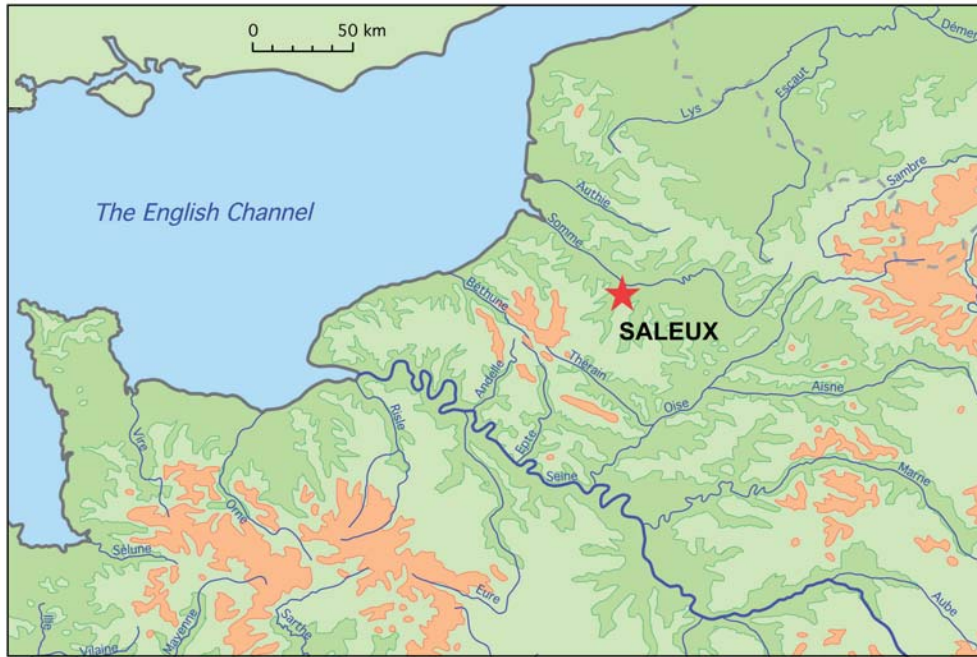


Fig. 1 – Saleux (Somme) Site location.

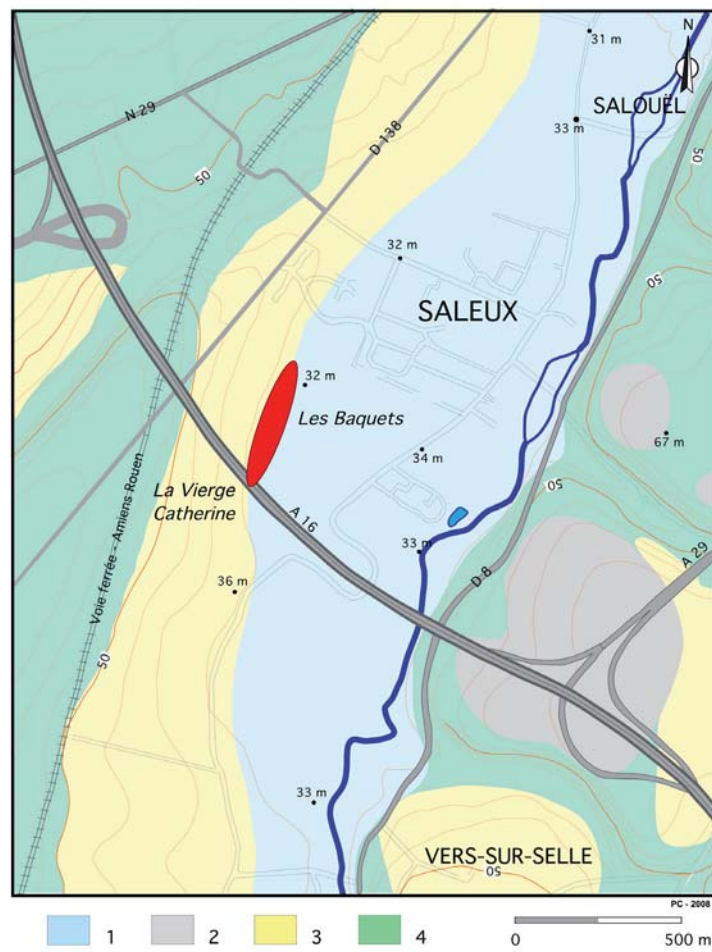


Fig. 2 – Saleux (Somme). Geomorphological and topographic context of the site. 1: floodplain; 2: alluvial gravels; 3: loess and colluvial loam; 4: chalk. In red: extent of the site over approximately 400 m bordering the river floodplain between La Vierge Catherine and Les Baquets.



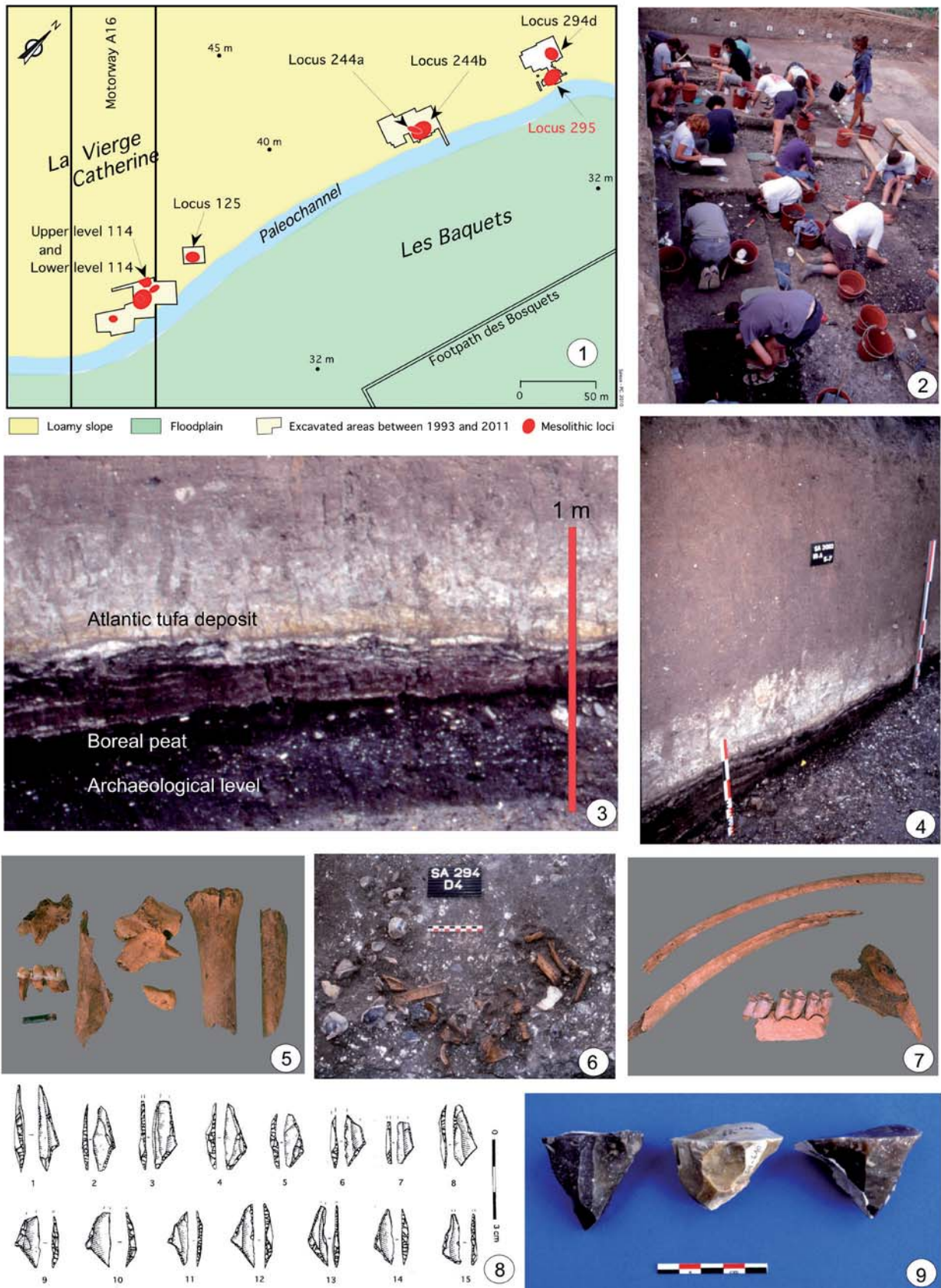


Fig. 3 – Saleux (Somme), Les Baquets. Mesolithic locus 295. 1: Location of the main Mesolithic loci; 2: partial view of the excavation of locus 295, during the 2003 field season; 3 and 4: stratigraphy of locus 295 showing the development of holocene formations overlying the archaeological occupation at the edge of a paleochannel; 5 to 7: osseous remains demonstrating the good preservation of organic material; 8: microliths (triangles); 9: unipolar bladelet cores.

## CHRONOLOGICAL AND CULTURAL ATTRIBUTION OF THE INDUSTRY FROM LOCUS 295

The lithic industry, which contains around a hundred microliths, has already been the subject of a preliminary analysis (Fagnart et al., 2008). The Mesolithic assemblage is distinguished by the presence of a number of slightly elongated scalene triangles constituting 40% of the microliths (fig. 3, no. 8). Certain slightly shorter examples are typologically similar to isosceles triangles, while the remainder of the Mesolithic component is comprised of a significant number of obliquely truncated points (44% of the microliths) and, to a lesser extent, points with a transversely retouched base (16% of the microliths). Unlike the other Mesolithic occupations at Saleux, locus 295 has produced a sizeable collection of domestic tools, including 14 endscrapers and twenty or so retouched or used flakes. This composition differs radically from the other loci of the site where hunting or butchery activities seem to dominate or are the sole activities present (rarity or absence of domestic tools).

Four radiocarbon dates were produced from osseous remains; the first three on wild boar bones (Beta-170947: 8590 ± 40 BP, Beta-191693: 8510 ± 50 BP, Beta-170948: 8310 ± 40 BP) and the fourth, slightly younger, on beaver bone (Beta-191694: 8210 ± 50 BP). These dates place the Mesolithic occupation towards the middle or second half of the Boreal chronozone around 8500 BP (or 7550 calBC). According to the techno-typological character of the lithic industry, the occupation of locus 295 could be related to the Chinru group (Gob, 1981; Crombé, 1999; Crombé and Cauwe, 2001) or the 'Beuronian with triangles' of the middle phase of the Mesolithic (Ducrocq, 2009; Ducrocq, this volume). This 'triangle phase' of the Boreal falls chronologically between Mesolithic groups characterised by the presence of numerous points with a retouched base and crescents from the end of the Preboreal to the first half of the Boreal and groups set apart by the significant development of narrow backed bladelets and microliths with flat retouch from the end of the Boreal (Ducrocq, 2009).

## SPATIAL ORGANISATION OF LITHIC REMAINS

Locus 295, which is particularly dense, has produced more than 7,000 lithic or osseous artefacts spread over some fifty square metres. More than 3,000 lithic artefacts have been recovered, including around a hundred microliths, thirty or so domestic tools, 69 cores, some 1,000 heated stones and a little more than 3,000 osseous remains of which 679 are identifiable. These counts do not take into account the copious number of chips. The squares with the most finds can contain as many as 500 lithic or bone artefacts. The distribution of

artefacts depicts three main concentrations (fig. 4A). The two richest are situated on both sides of hearth C19 and seem to form elements of a peripheral ring around this feature which was partially destroyed by an evaluation trench in 2002. The third zone is found slightly to the northwest of the combustion feature.

The large number of thermally altered lithics constitutes one of the major characteristics of locus 295. More than a thousand small blocs or pieces of flint between 2 and 5 cm in size and 7,000 thermal chips have been recovered. As a whole, evidence of heat-altered lithics amounts to 30 kg collected from the excavation surface. Nodules or blocks of flint 10 to 15 cm in diameter were used as heating stones. Once fragmented, these stones were set aside during different restructuring phases of the C19 combustion feature, which comprises 200 heated elements and a little more than a 1,000 thermal chips alone. Two main discard zones can easily be discerned, one to the north and the other to the east of the hearth (fig. 4B).

Distribution plans of the lithic industry according to major artefacts categories are very informative and bring to light separate areas assigned to specific activities (fig. 5, 6 and 7). To the north-west of hearth C19, an important concentration of microburins spread over an area of 33 m<sup>2</sup> attests to the production of microliths (fig. 5A). This small well-defined zone, immediately adjacent to the combustion zone, sits at the centre of the maximal scatter zone of microliths recovered over 20 square meters. In the broadest sense, this zone to the north-west of hearth C19 represents an activity area tied to the arming or re-arming of arrows (fig. 5B). A small secondary concentration of microliths can be distinguished 5 or 6 m to the south-west of the same hearth. Future macro- and microwear analyses of these projectile points will help elucidate the manufacture and maintenance methods of projectile weapons and their respective positions in the occupation.

Domestic tools are concentrated in a marginal zone approximately 5 m to the north-west of hearth C19 and are quite sparse in the immediate surroundings of this combustion feature. Endscrapers are particularly well-represented and according to the preliminary use-wear analysis of C. Guéret can be linked to basic skin processing, probably in the course of drying, by moderate scraping over short durations. This activity more likely represents the acquisition of a raw material rather than an actual transformation of skins into leather (Guéret, 2008).

Areas assigned to flintknapping are underscored by the scattering or discard of cores to the north-west of the hearth and, to a lesser extent, on either side of the combustion feature. Refits carried out with the collaboration of G. Noens and L. Lombaert weave together short or medium length networks between varying areas of the space occupied (fig. 7B). The refitting program is still ongoing, however initial, albeit partial, results seem particularly significant and will largely contribute to the study of the Mesolithic occupation's spatial dynamics.

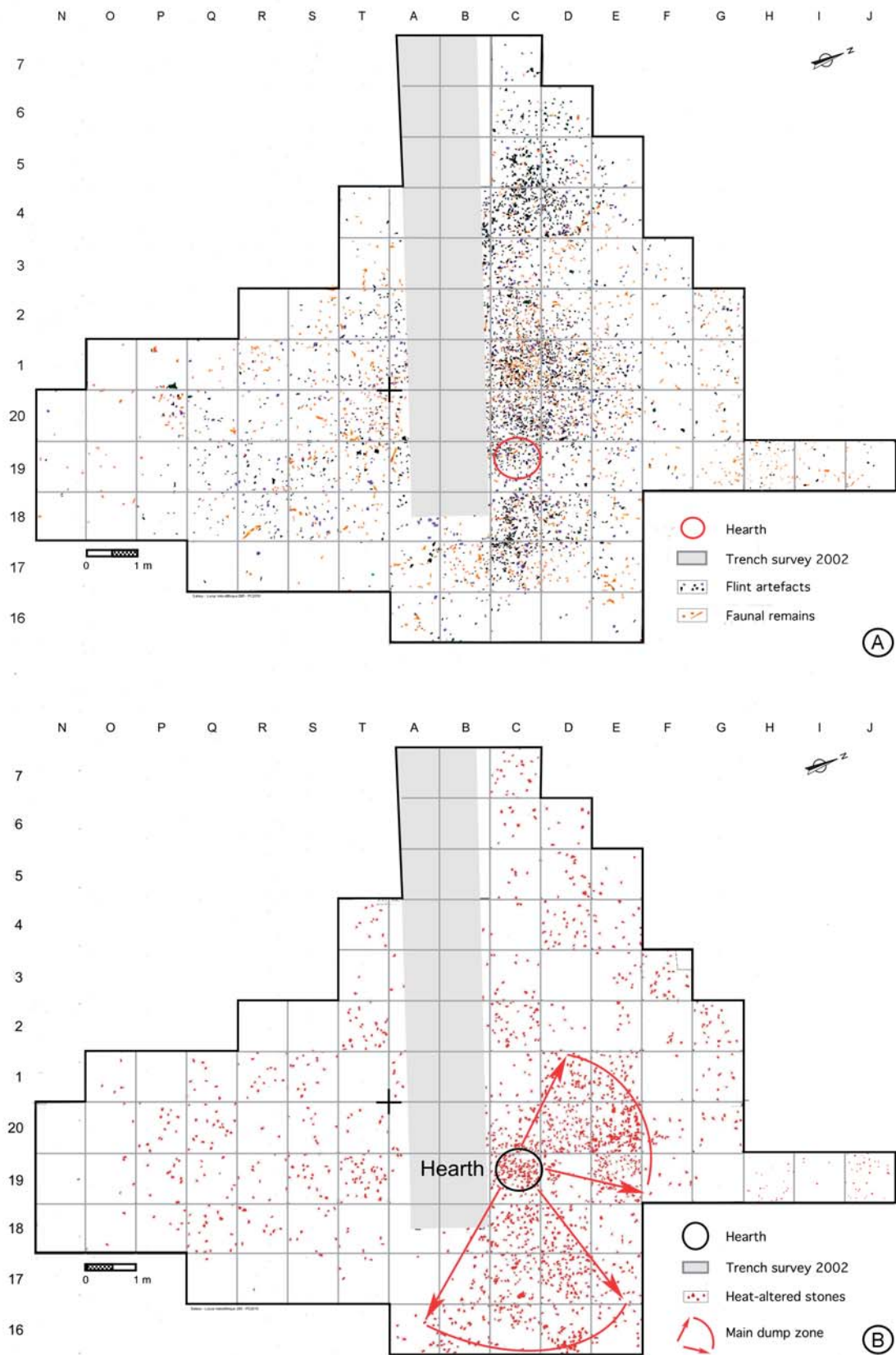


Fig. 4 – Saleux (Somme), Les Baquets. Mesolithic locus 295. A: distribution of all lithic and osseous remains; B: distribution of heated stones and the two main discard zones.

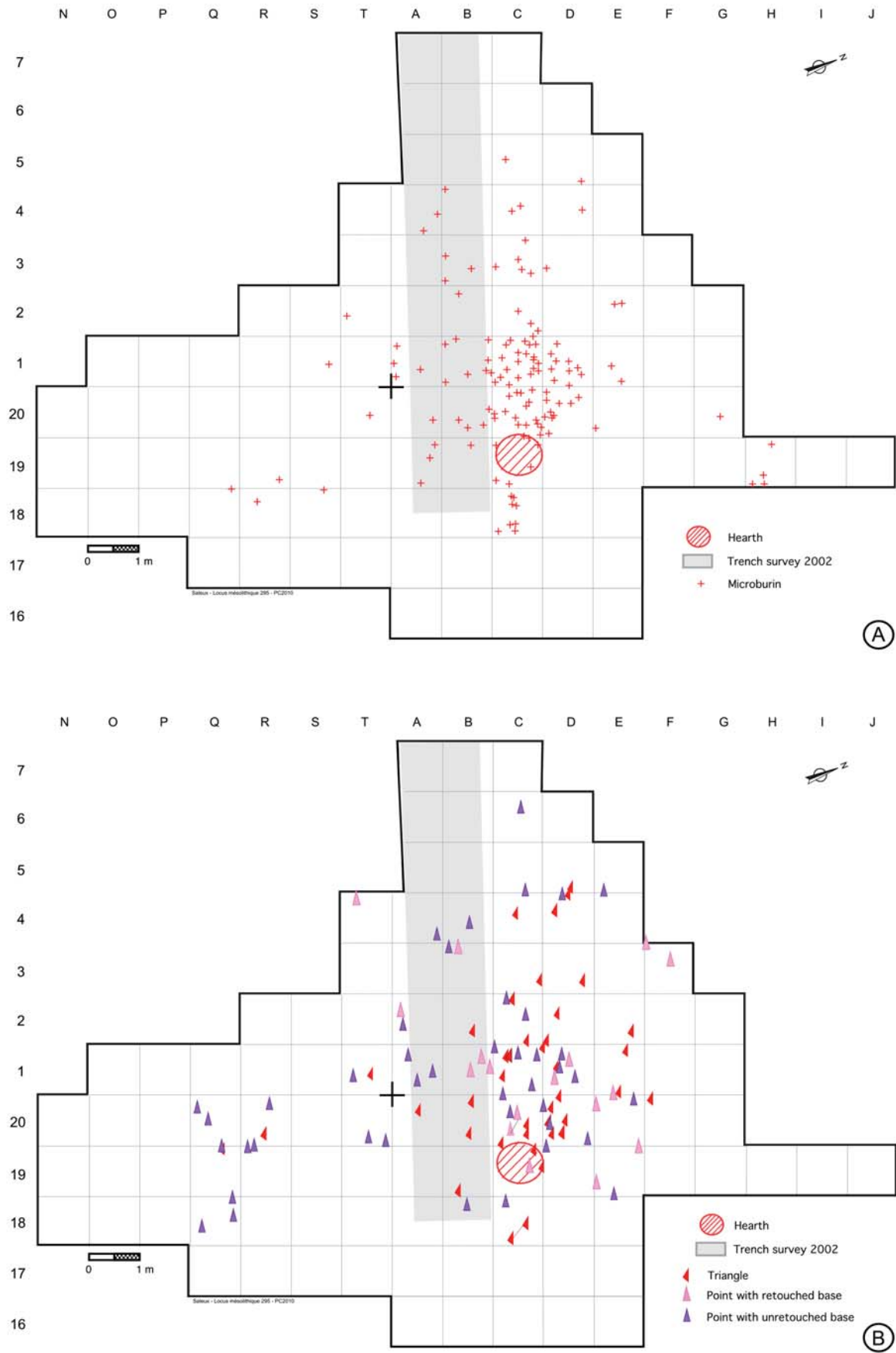


Fig. 5 – Saleux (Somme), Les Baquets. Mesolithic locus 295. A: distribution of microburins; B: distribution of microliths.

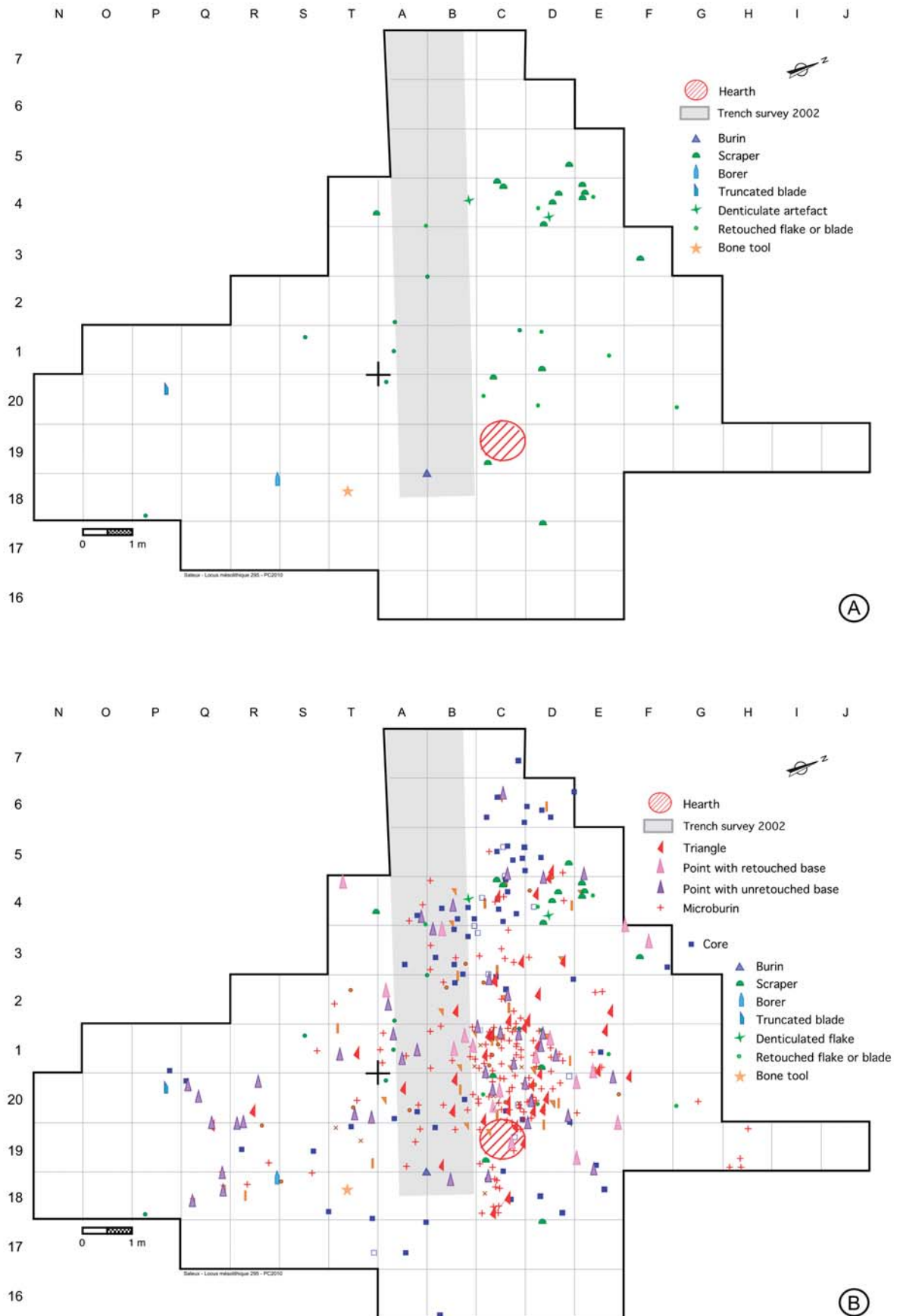


Fig. 6 – Saleux (Somme), Les Baquets. Mesolithic locus 295. A: distribution of domestic tools; B: distribution of all tools, microburins and cores.

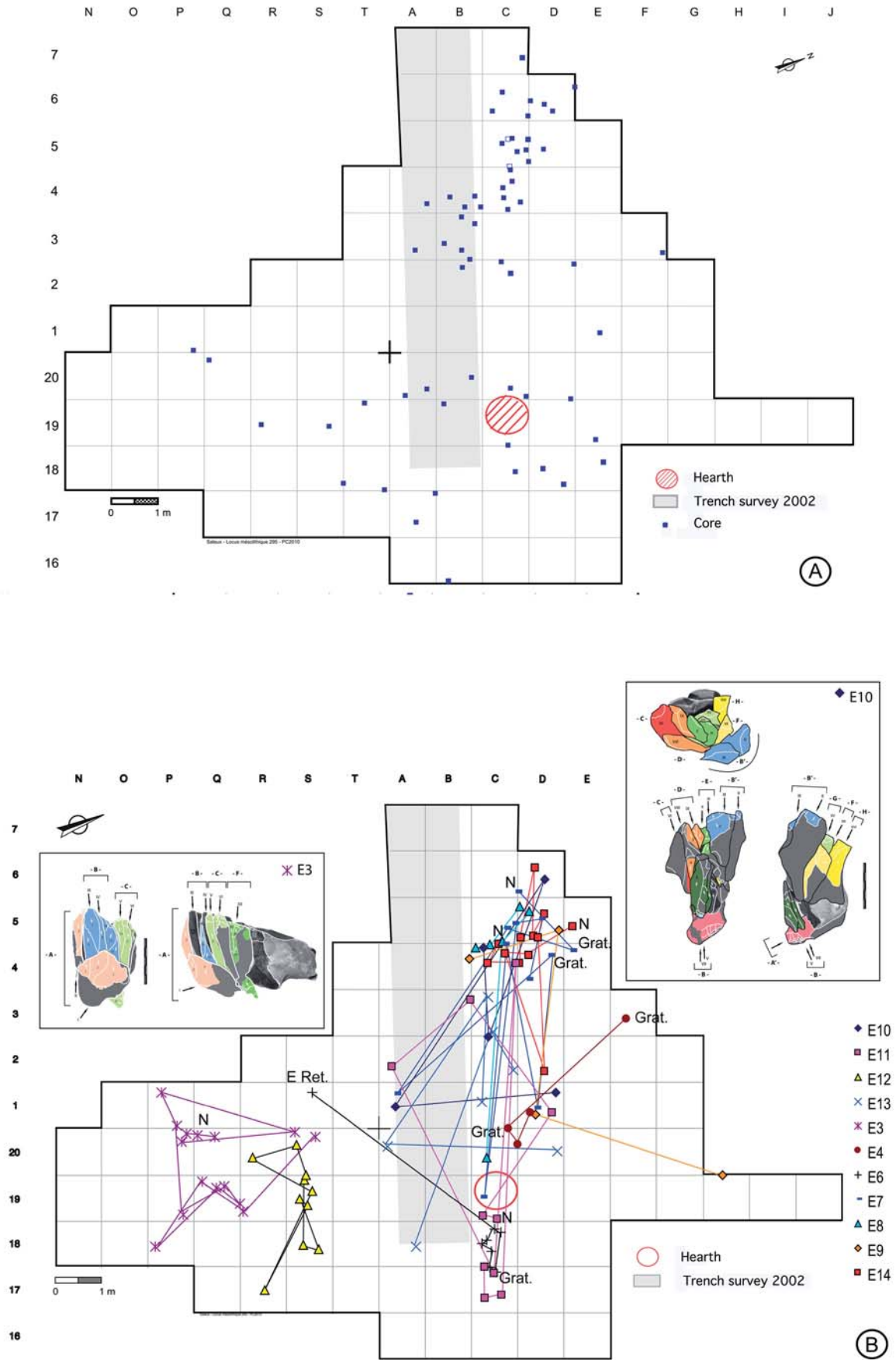


Fig. 7 – Saleux (Somme), Les Baquets. Mesolithic locus 295. A: distribution of cores; B: distribution of refits.

## GENERAL FAUNAL DATA

Faunal material from locus 295 of Saleux consists of 3275 remains of variable size and is composed of animal species which are generally typical for this period (table 1 and for comparison: Bridault, 1994 and 1997; Ducrocq et al., 2008). In terms of number of remains (NR) wild boar (*Sus scrofa*), along with red deer (*Cervus elaphus*) and aurochs (*Bos primigenius*) are especially well-represented.

Species	NR	% NR	NMIc	% NMIc
Wild boar ( <i>Sus scrofa</i> )	330	48,6	6	31,58
Beaver ( <i>Castor fiber cf. galliae</i> )	160	23,56	3	15,79
Aurochs ( <i>Bos primigenius</i> )	83	12,22	2	10,53
Red deer ( <i>Cervus elaphus</i> )	60	8,84	2	10,53
Marten ( <i>Martes martes</i> )	13	1,92	1	5,26
Wildcat ( <i>Felis sylvestris s.</i> )	10	1,47	1	5,26
Roe deer ( <i>Capreolus capreolus</i> )	5	0,74	1	5,26
Badger ( <i>Meles meles</i> )	4	0,59	1	5,26
Mistle thrush ( <i>Turdus viscivorus</i> )	3	0,44	1	5,26
Anatid ( <i>Anatidae sp.</i> )	1	0,15	1	5,26
Mole ( <i>Talpa europaeus</i> )	3	0,44		
Fiel vole ( <i>Arvicola terrestris</i> )	7	1,03		
<b>Total NR determined</b>	<b>679</b>	<b>100</b>	<b>19</b>	<b>100</b>
<i>Cf. Bos primigenius</i>	13			
<i>Cf. Castor</i>	19			
<i>Cf. Turdus viscivorus</i>	2			
Rodents undetermined	2			
I/II	448			
II	215			
II/III	546			
III	23			
Splinters undetermined	1328			
<b>Total NR undetermined</b>	<b>2 596</b>			
<b>Total NR</b>	<b>3 275</b>			

**Table 1 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Faunal spectrum. Some undetermined remains could provide size class informations in relation with animal body size : I – birds, rodents, Beaver, Wildcat, Marten ; II – Badger, Wild boar, Rod deer ; III – Red deer, Aurochs.**

However, numerous beaver bones (*Castor fiber cf. galliae*) rank this rodent second best among represented species. Scarce remains also indicate the presence of wild cat (*Felis sylvestris s.*), badger (*Meles meles*), roe deer (*Capreolus capreolus*), pine marten (*Martes martes*) and two bird species: an unidentified *anatidae* and mistle thrush (*Turdus viscivorus*). Although unrelated to hunting activities, it is important to note the presence of European water vole (*Arvicola terrestris*) and mole (*Talpa europaeus*).

As the faunal list may already suggest it, the taphonomic context of locus 295 is generally very good, despite several minor variations between different areas (Bignon, 2008). Weathering is hardly perceptible, while localised crushing and rootlet traces are also infrequent and restricted. Bone breakage patterns indicate that they were essentially fractured while still ‘fresh’. However, a small number of faunal remains (n = 54) bear pronounced alterations unlike the large majority of the fauna from locus 295. These intrusive elements were excluded from our counts and belong either to another Mesolithic locus or a *Federmesser* occupation situated slightly upslope. Be that as it may, the preservation is excellent for an open-air site and presents ideal conditions for spatial analysis.

## OBJECTIVES AND RESULTS OF THE SPATIAL ANALYSIS OF FAUNAL REMAINS

In line with the relatively high number of remains for a Mesolithic occupation, our main concern was to establish whether or not any spatial organisation of butchery activities could still be discerned. This preliminary analysis is designed to bring to light butchery operations related to carcass processing. Our observations and counts are currently only at the scale of square metres, however we plan to carry out more precise studies in the near future. Four anatomic segments were defined and comprise several different skeletal elements; the vertebral column (vertebrae and ribs), the head (skull, mandible and teeth), and the anterior and posterior members. Through the segmentation process, our spatial analysis aims to reconstruct certain dynamics linked to phases of processing and consumption of animal resources and, ultimately, allows us to deduce information about how they were acquired.

### General quantitative and qualitative aspects

Much like the lithic elements, several concentrations of fauna are readily observable in close proximity to the hearth (fig. 8). The number of remains per square metre indicates that the main concentration is found to the west of this hearth (C-D/1-20), while another equally dense concentration may have existed in H19, but its extent is unknown. The main concentration C-D/1-20 is bordered by secondary concentrations at its perimeter, to the south, east, west and north. Quantitatively, these concentrations

represent the abandonment of small fragments from the final phase of carcass processing, *i.e.* breaking bones to recuperate the marrow.

The differential distribution of anatomical segments by species is also instructive. Small-bodied taxa represented by a single individual are spread along the periphery of the main concentration and the hearth, exclusively in sectors 294 and 295 (fig. 9). This is the case with mistle thrush (to the south-east of the hearth), the *anatidae* (to the south-west), pine marten (to the east), wild cat (to the north) and badger (to the north and east). Larger sized animals have quite a different distribution, as seen with several roe deer posterior member fragments also at the margins of the main concentration, but to the south and south-east (fig. 9). The distribution of different anatomic segments of red deer and aurochs (fig. 10) seems to indicate that butchery activities mainly took place to the south of the hearth. The lack of spatial restrictions created ideal conditions for the processing and dismemberment of larger species. The spatial distribution of wild boar and beaver, the two best represented species in terms of the number of remains and the minimum number of individuals by combination (MNIc), is discussed below.

**Distribution of wild boar remains**

As with larger species, the majority of wild boar vertebral column elements are found to the south and east of the

hearth in what seems to be an area reserved for processing the trunk (fig. 11). However, the vertebrae recovered from the east and north of the hearth suggest that certain dorsal portions were treated in separate areas. The distribution of head elements in various areas partially overlaps with vertebral column segments: note the high density of remains to the south and east of the hearth (fig. 12).

Anterior and posterior members have a different distribution, despite certain overlaps. The dispersion of the scapulae suggests that the anterior members could have been detached from the spine in order to be processed in different areas around the hearth (fig. 13). These elements are mainly found to the south and west of the main concentration, and to a lesser extent, to the east. Conversely, the posterior members are generally distributed further away to the south and their presence seems more important to the north-east of the hearth (fig. 14). The coxal bones demonstrate the processing of vertebral columns in several zones.

**Distribution of beaver segments**

Beaver is much better represented than is the norm for the Mesolithic and remains of this species are found in significant numbers in the northern half of the site, as is the case with other small species. However, the ways in which butchery was carried out is, in certain ways, reminiscent of the spatial organisation observed with larger

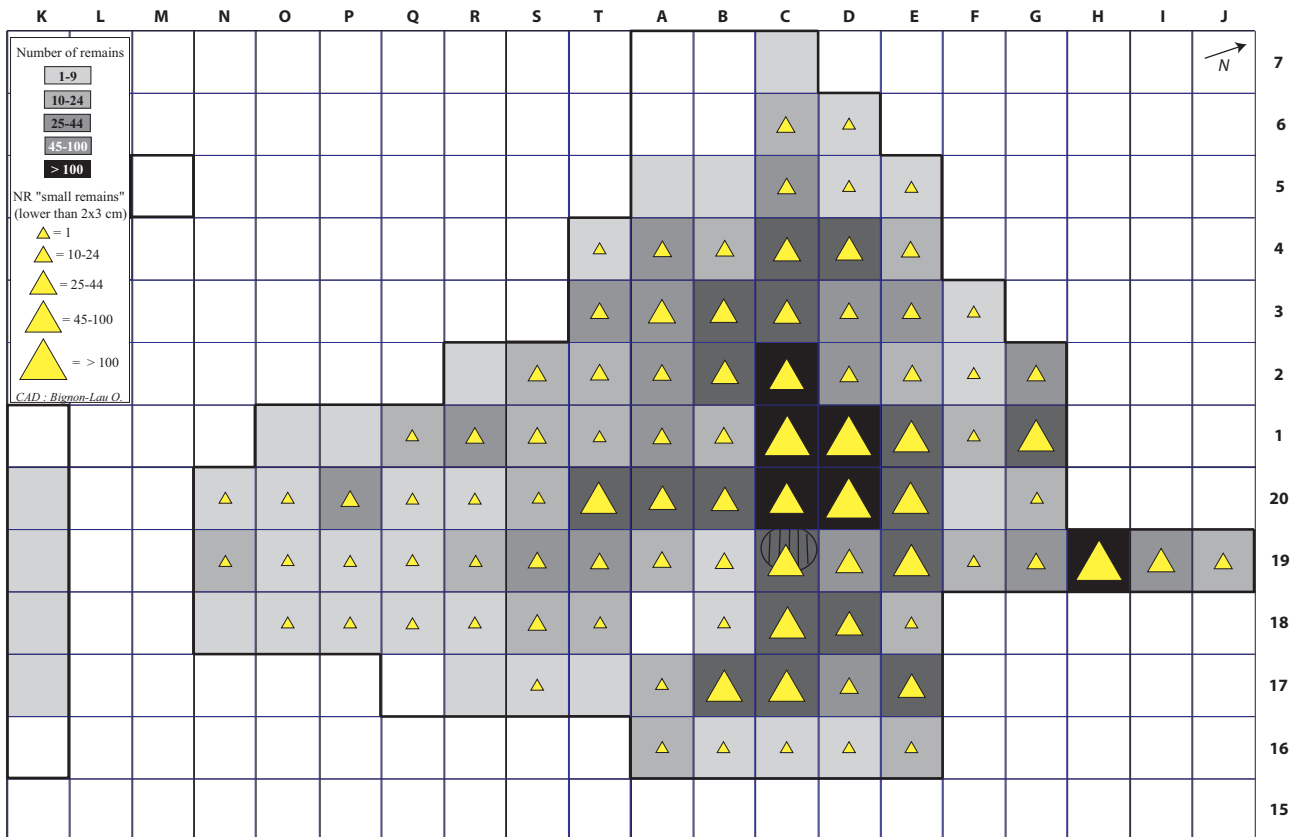


Fig. 8 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Density of faunal remains by square metre (in number of remains) and contribution by NR of small remains (less than 3 x 2 cm, yellow triangles).



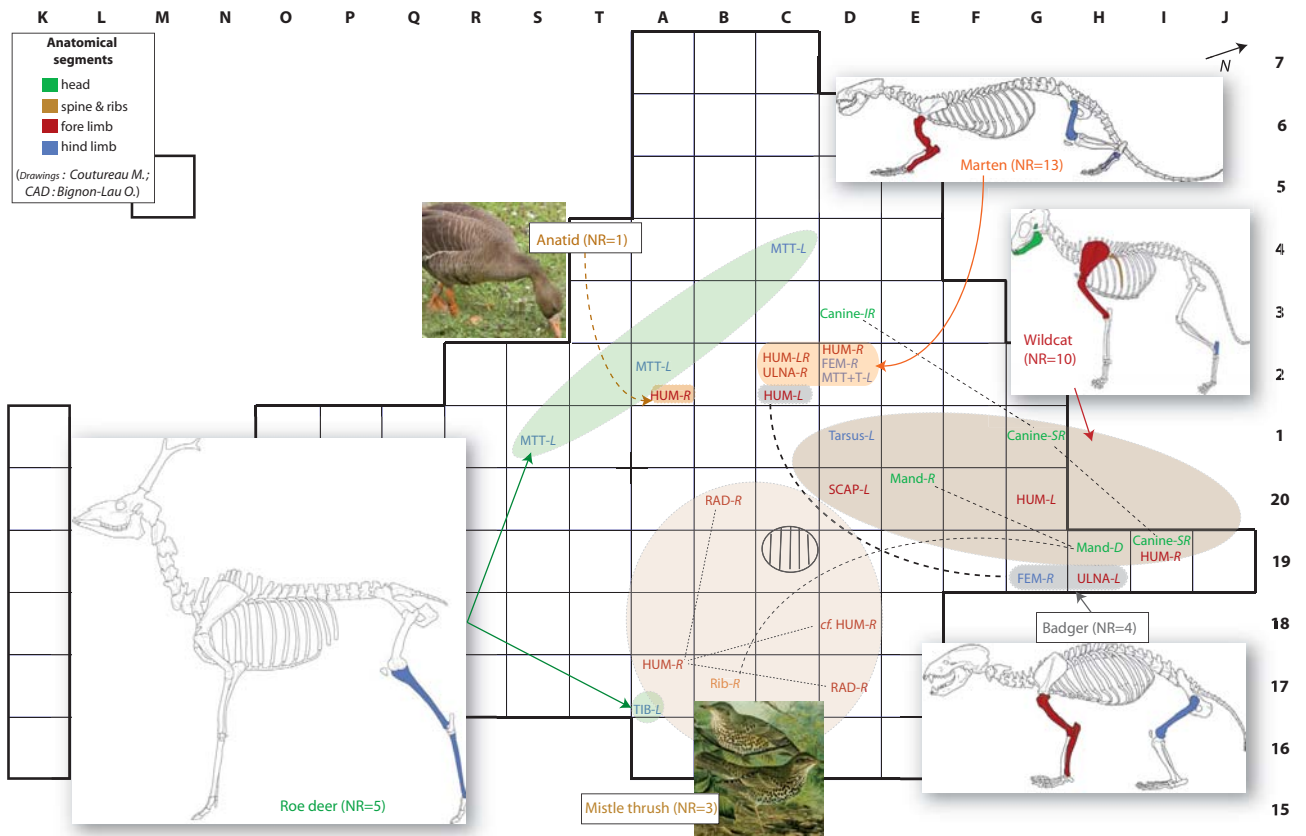


Fig. 9 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Spatial distribution of species represented by a single individual.

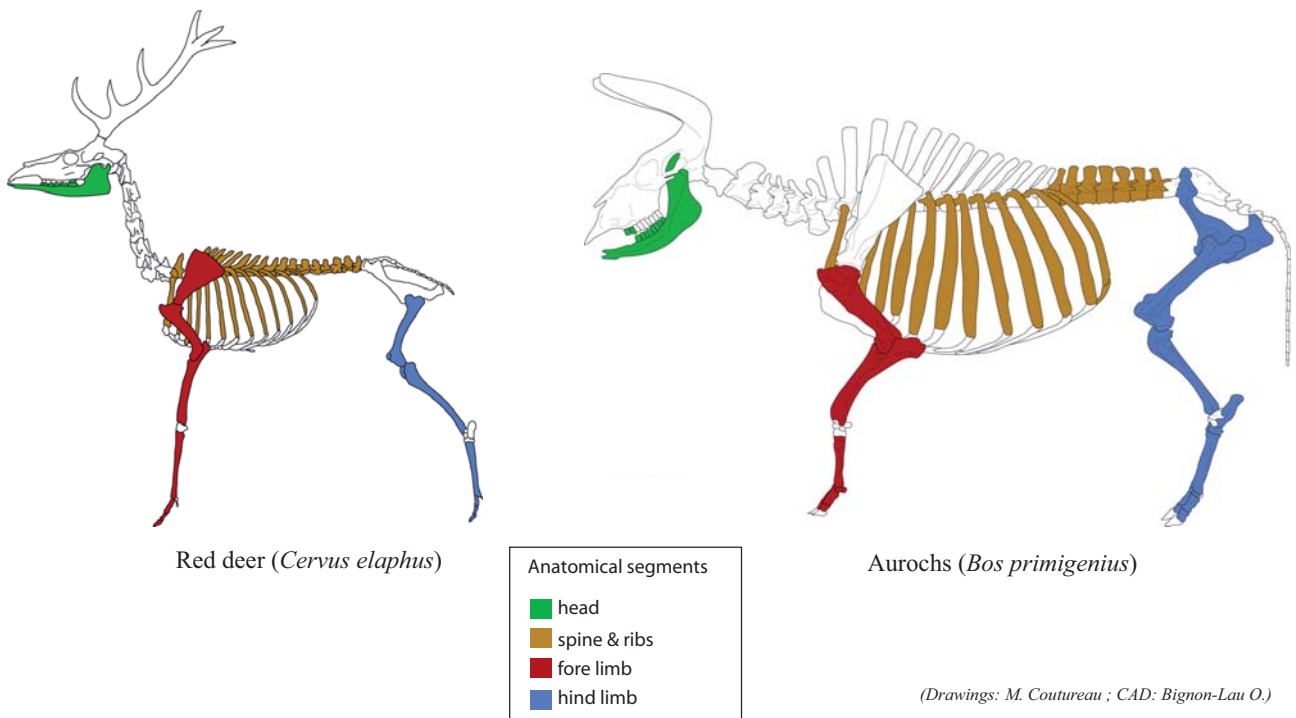


Fig. 10 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Identified skeletal parts of red deer (*Cervus elaphus*; NR = 60, MNIc = 2) and aurochs (*Bos primigenius*; NR = 83, MNIc = 2).

species. Discard zones of spine fragments are situated to the south-east and east of the hearth (fig. 15) and contrast with those where head fragments were discovered (fig. 16). To the west of the hearth, anterior and posterior members have an identical spatial distribution (fig. 17).

Certain incisors were recuperated from mandibles by extraction, sawing or snapped off (fig. 18). These operation were carried out at the periphery of main butchery activities in marginal zones that were less dense. It is also interesting to note an overlap in the distribution of beaver head fragments and zones relatively rich in endscrapers (fig. 6A).

**Spatial organisation of faunal remains: a preliminary assessment**

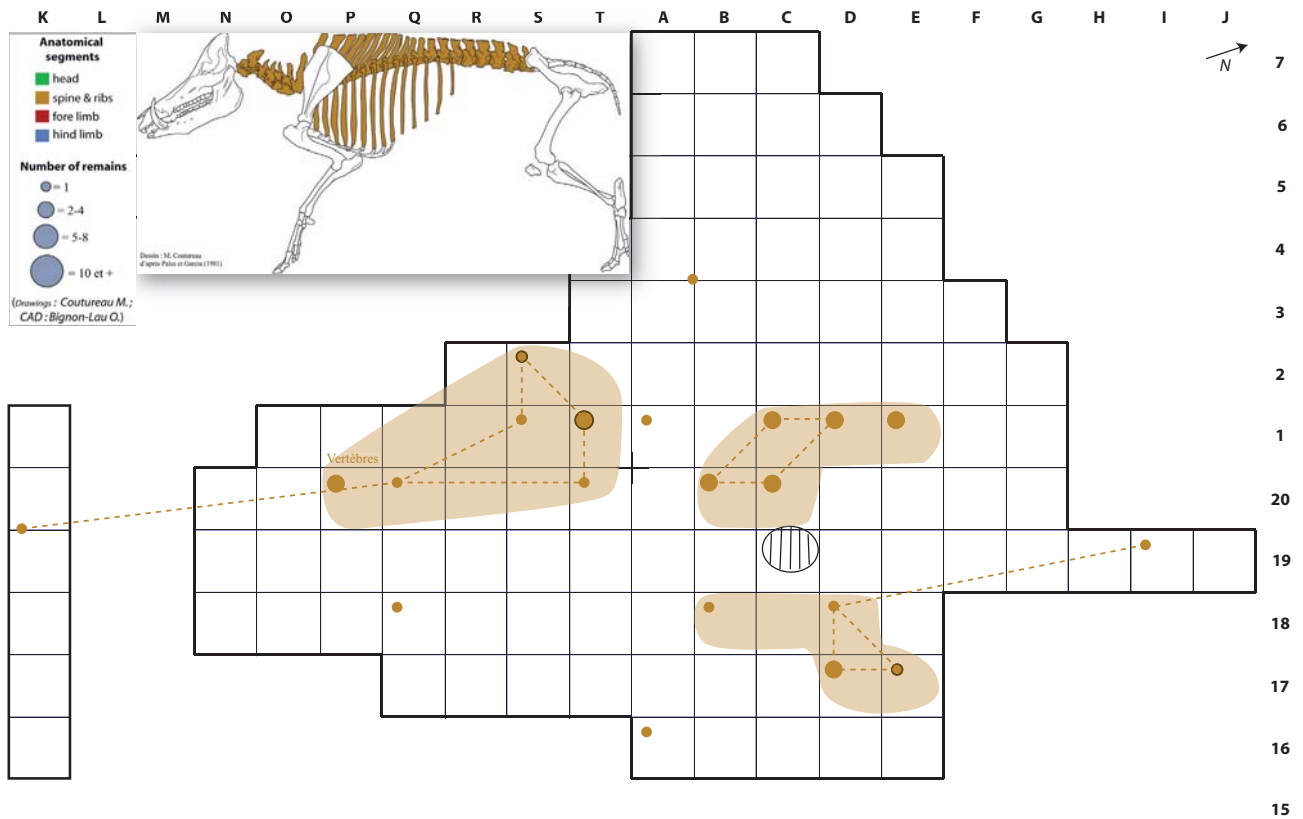
Of all the species represented by more than one individual, often large-bodied, the differential distribution of segments and their spatially fragmented processing suggest that these operations occurred practically simultaneously. Segmentation activities involving heads, members and trunks of carcasses seems to have taken place to the south/south-west of the hearth (fig. 19). This organisation enabled the concurrent and efficient processing of carcasses to take place in different zones around the hearth. The main and secondary concentrations correspond to areas where the final phases of butchery took place, such as breaking bones to extract marrow. A portion of the

marrow was consumed *in situ* around the hearth during the final exploitation of the carcasses. The formation of discarded bone concentrations accentuates their preferential abandonment in dedicated and/or managed zones. These choices, such as the unobstructed processing area to the southwest of the hearth, convey the degree to which butchery activities were organised at locus 295.

Even if anatomic segment distribution patterns are not precisely the same for any of the species, the low dietary interest of smaller species may explain their processing to the periphery of zones richer in faunal remains. Certain areas may also have been dedicated to technical activities, as can be seen with the processing of beaver incisors (fig. 18) or the cluster of discarded burnt bones away from the hearth (fig. 20). Furthermore, remains bearing traces of fangs or gnawing are found in peripheral areas and certainly indicate the activity of a domestic dog, as a wild carnivore would have been less inclined to restrict its feast to the mere margins of such an opportunity (fig. 21).

**CONCLUSIONS AND FINAL REMARKS**

The Mesolithic locus 295 from the site of Saleux presents ideal preservation conditions linked to its rapid sedimentary burial by Boreal peats, followed by calcar-



**Fig. 11 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements of the vertebral (vertebrae and ribs) of wild boar (*Sus scrofa*; NR = 330, MN1c = 6).**

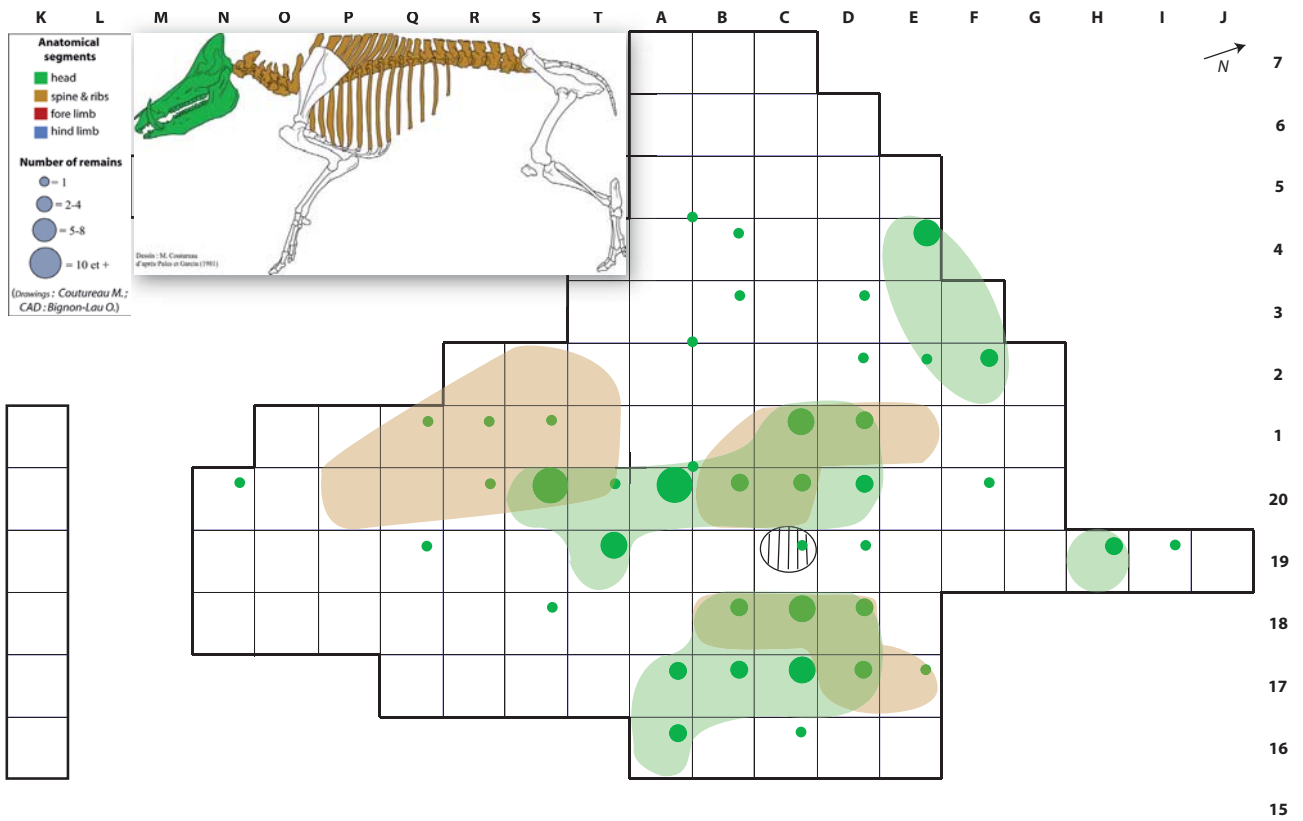


Fig. 12 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements of the head (skull, mandible, teeth) and vertebral column of wild boar (*Sus scrofa*; NR = 330, MNiC = 6).

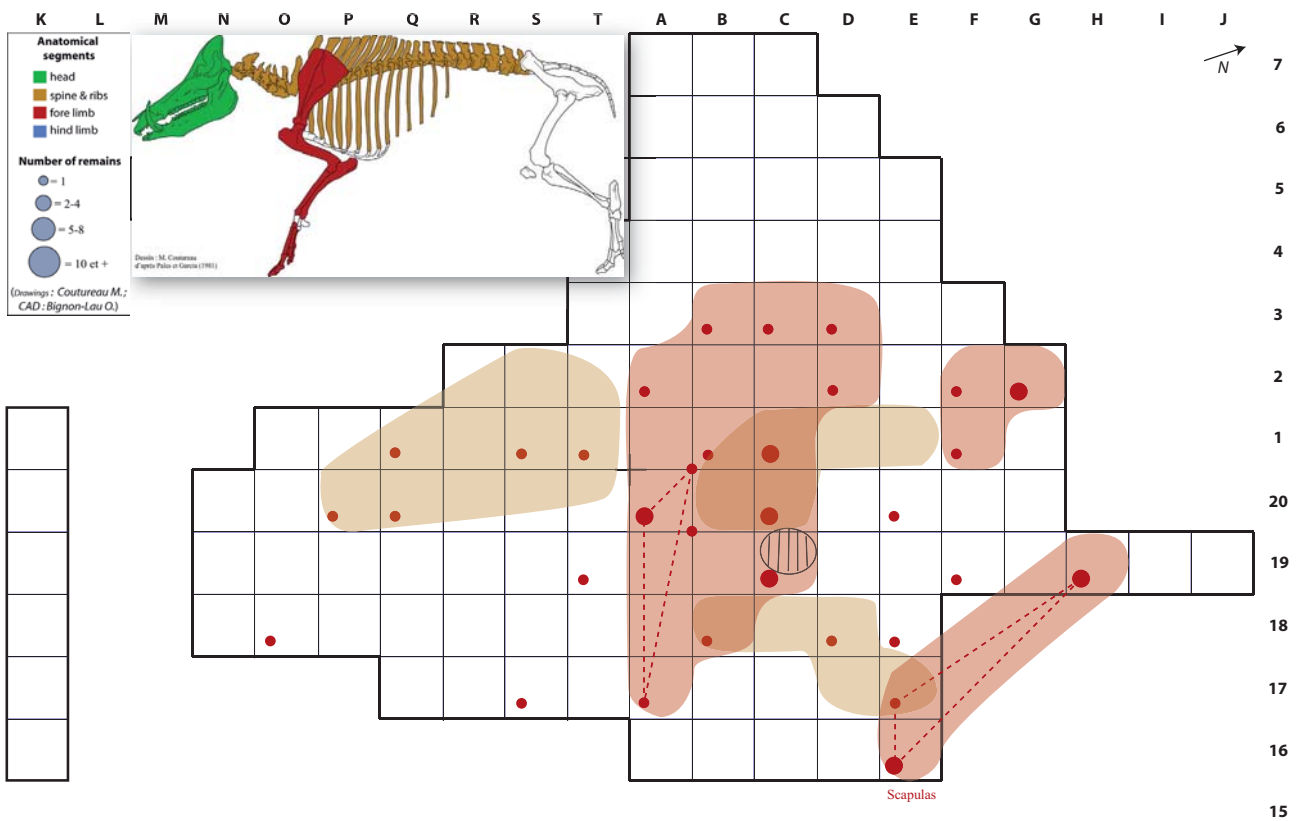


Fig. 13 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements of anterior members (scapula, humerus, radius, ulna) and vertebral column of wild boar (*Sus scrofa*; NR = 330, MNiC = 6).

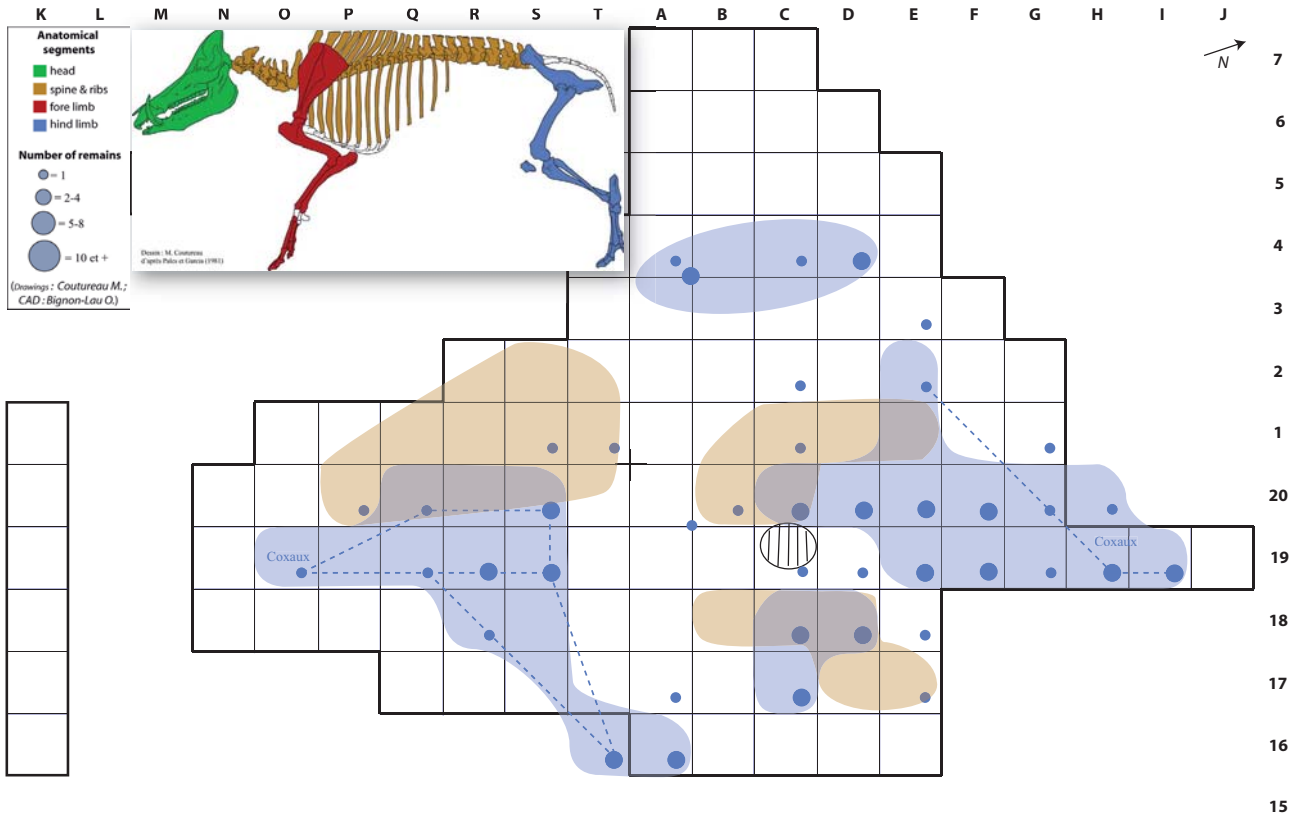


Fig. 14 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements of posterior members (scapula, humerus, radius, ulna) and vertebral column of wild boar (*Sus scrofa*; NR = 330, NMIC = 6).

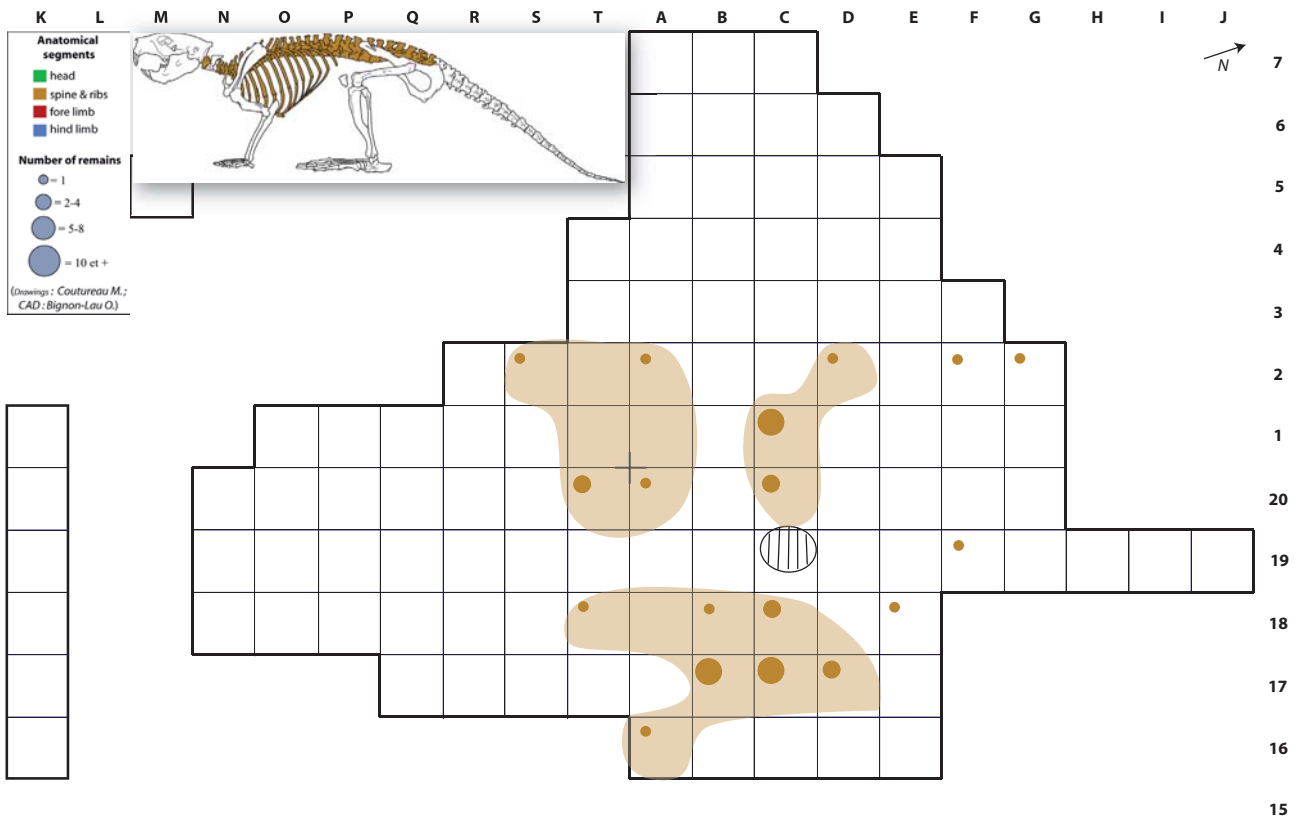


Fig. 15 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements of the vertebral column (vertebrae and ribs) of beaver (*Castor fiber*; NR = 160, NMIC = 3).

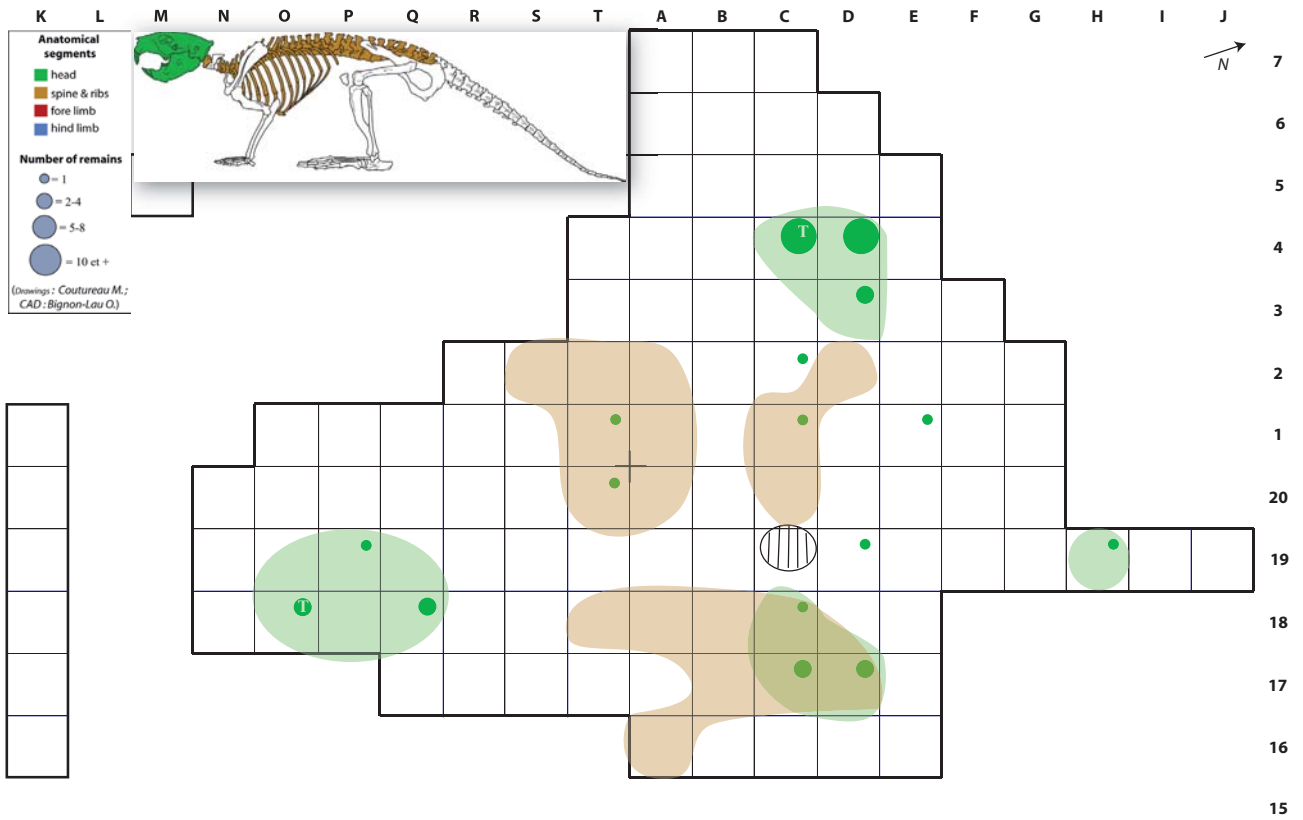


Fig. 16 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements from head segments (skull, mandible, teeth) and vertebral column of beaver (*Castor fiber*; NR = 160, NMIc = 3).

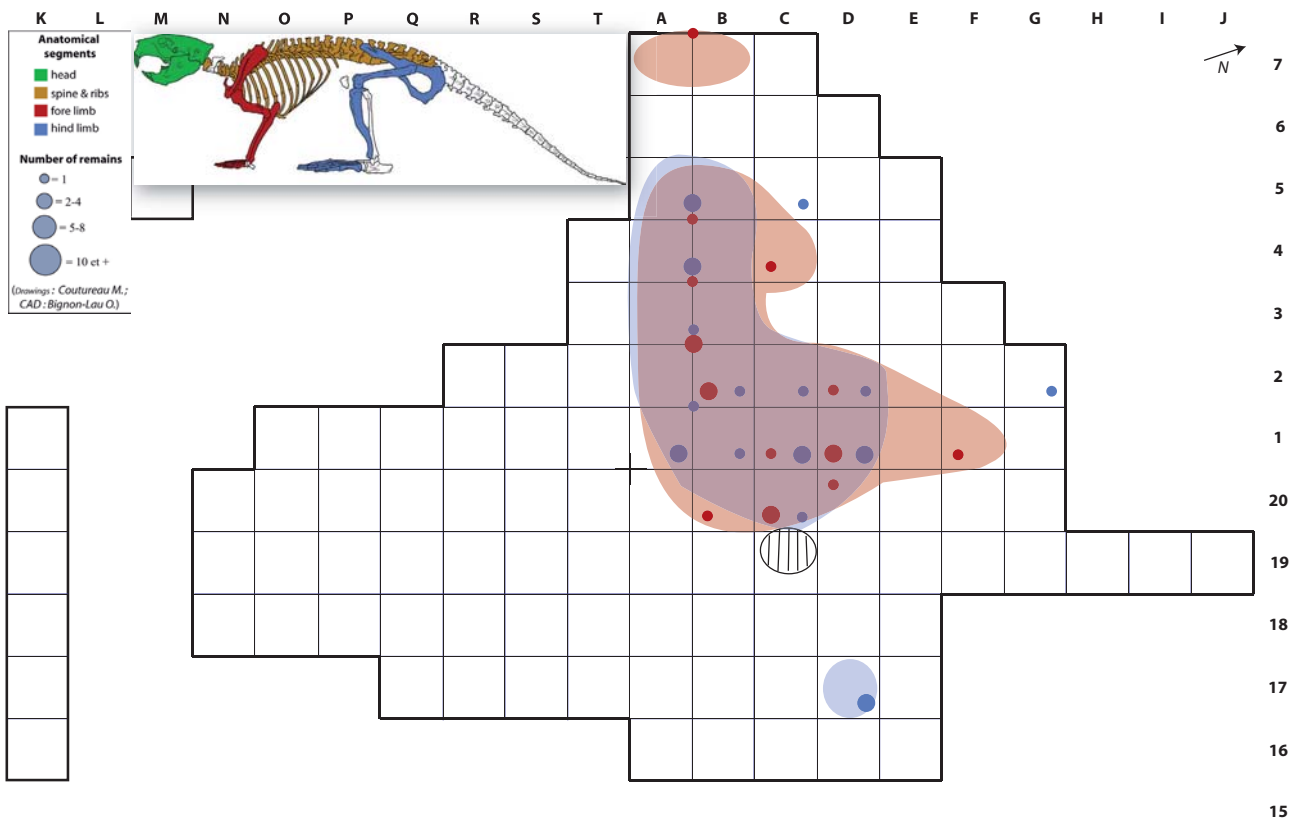


Fig. 17 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements from segments of anterior members (scapula, humerus, radius, ulna) and posterior members (coxal, femur, tibia, fibula) of beaver (*Castor fiber*; NR = 160, NMIc = 3).

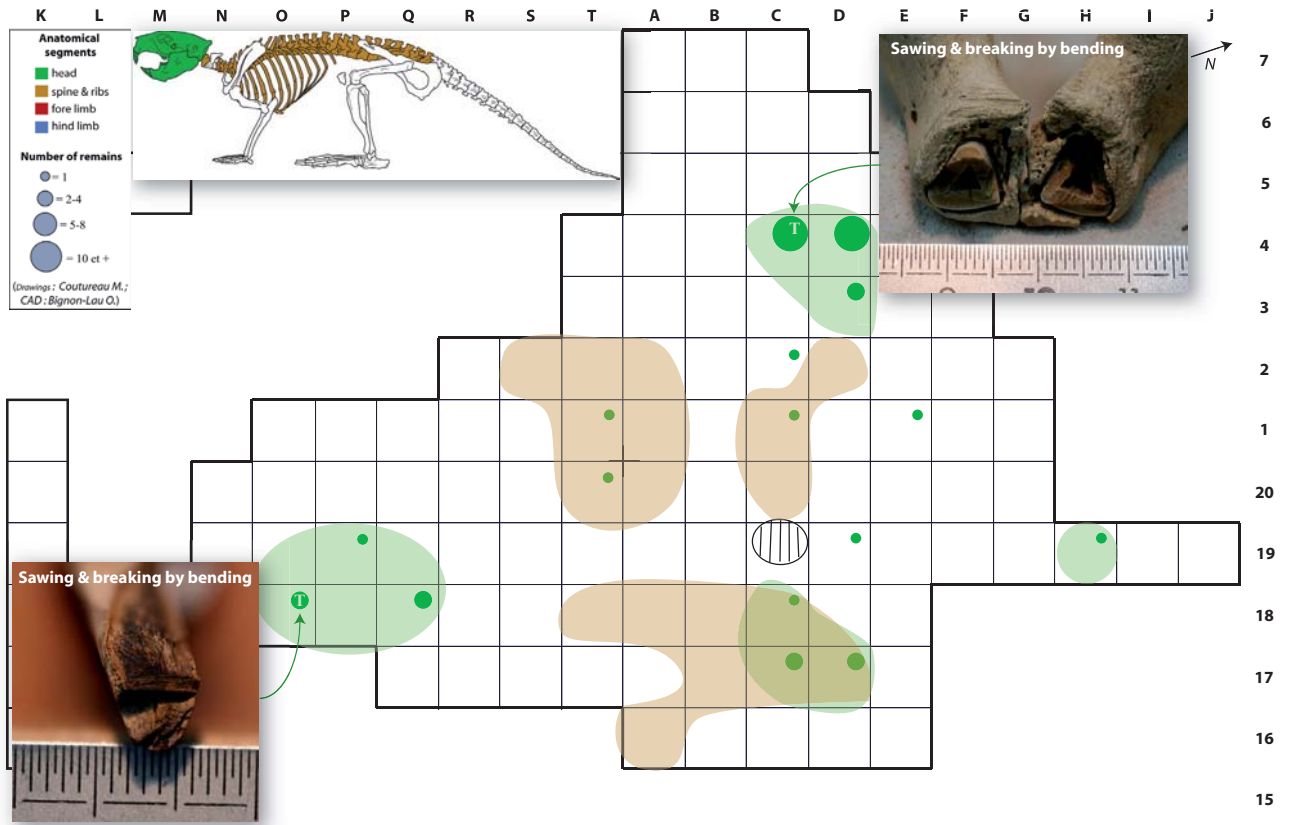


Fig. 18 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of head segments and location of worked beaver incisors (*Castor fiber*; NR = 160, NMic = 3).

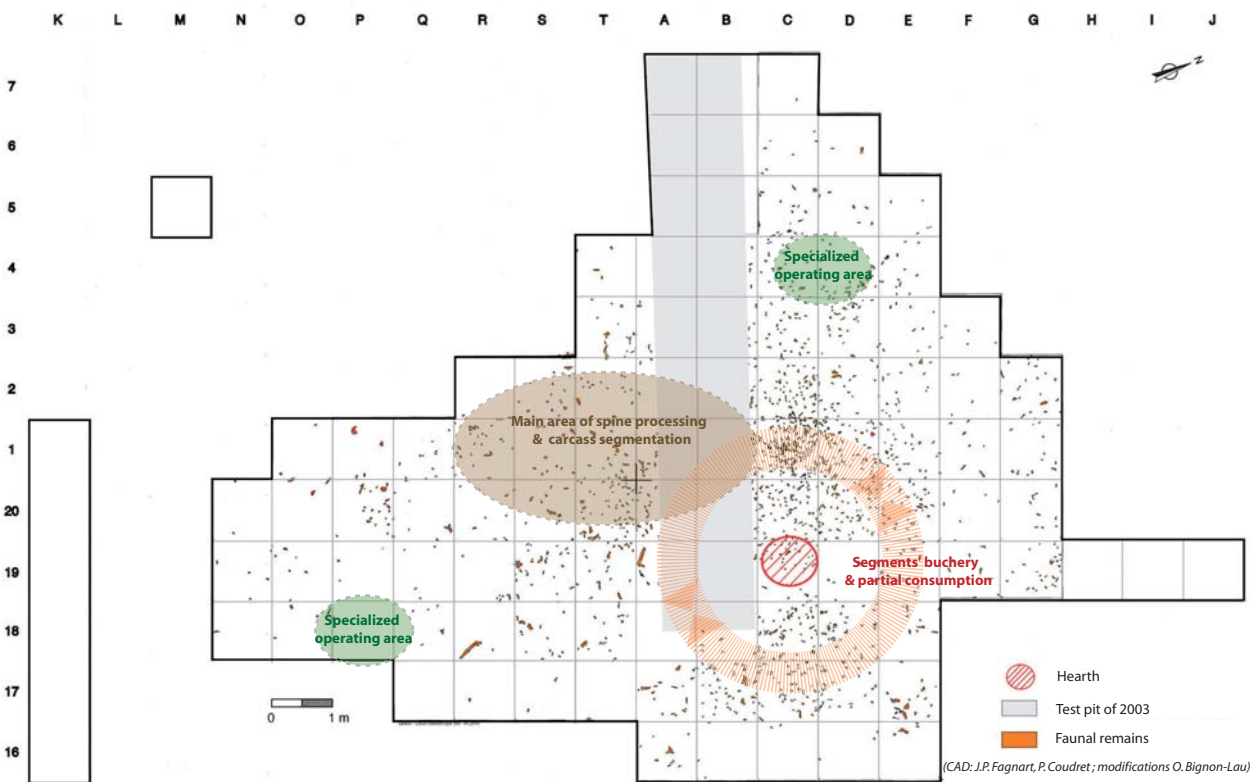


Fig. 19 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Synthesis of carcass processing based on the analysis of species distribution and their anatomic segments.

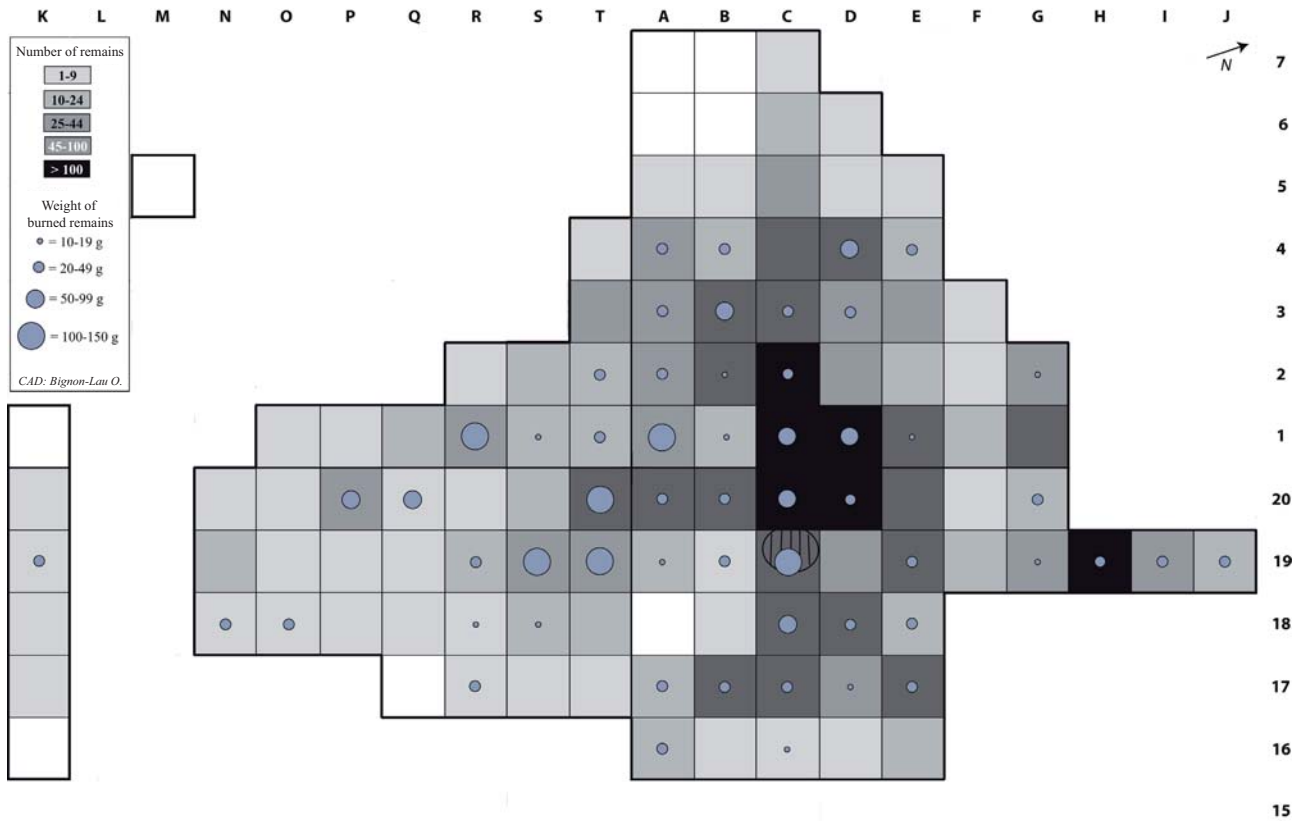


Fig. 20 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Weight density of faunal remains with traces of fire by square metre.

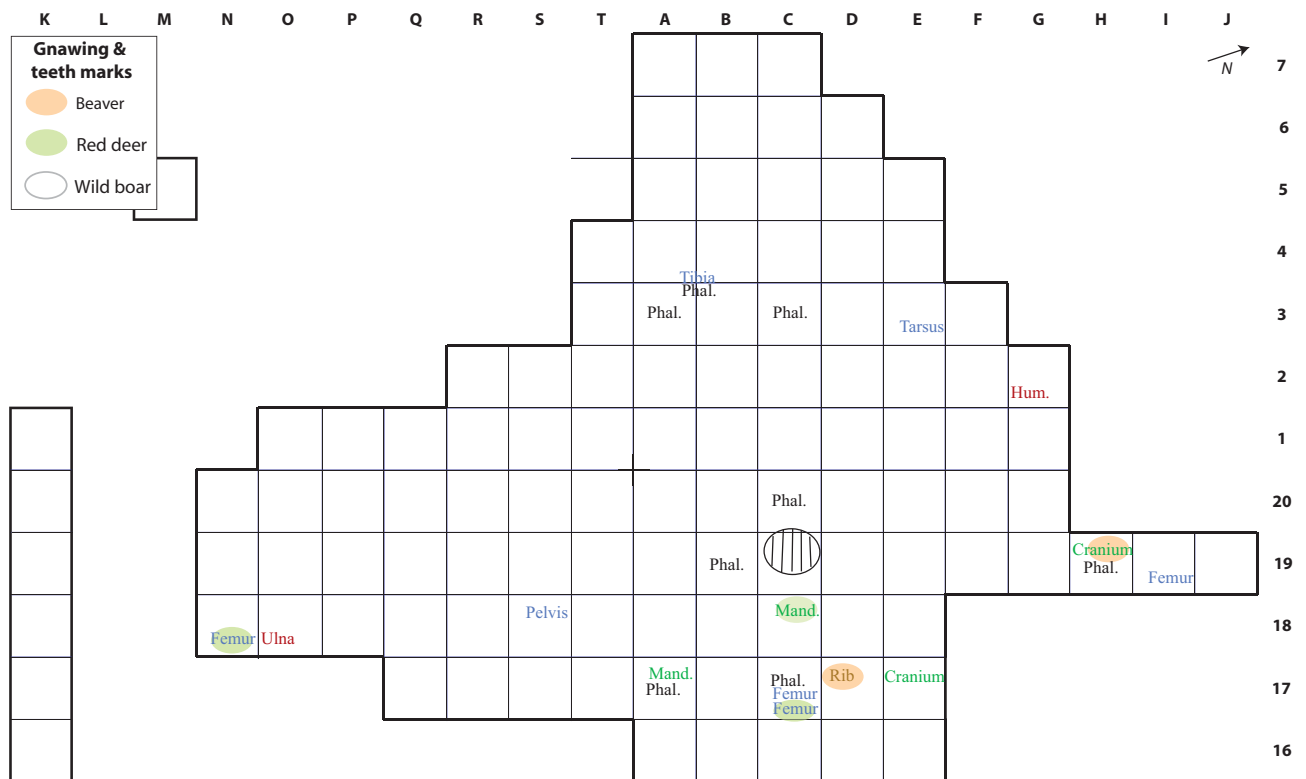


Fig. 21 – Saleux (Somme), Les Baquets. Mesolithic locus 295. Distribution of skeletal elements bearing traces of fangs or gnawing.

eous tufa. This favourable topographic position resulted in the excellent preservation of the archaeological level, as well as the original organisation of the remains. The unique typological component of the lithic industry associated with locus 295 sets it apart from other Mesolithic occupations of the site. Triangles play an important role in the range of microliths, alongside obliquely truncated points or points with a transversely retouched base. The originality of the industry is equally reflected in the presence of domestic tools which are rare or totally absent from other Mesolithic loci at Saleux. The occupation dates to the middle or second part of the Boreal, towards 8500 BP (7550 cal. BC).

The abundant and diversified fauna is dominated by wild boar. Due to the good preservation conditions of osseous remains, we can assert that the data related to prey is not affected by any differential preservation or a taphonomic bias. Such phenomena are however much more consequential in loci situated upslope on the alluvial apron of the lowest terrace of the Selle, which lies outside of the depositional zone of the Boreal peat. A preliminary spatial analysis of the faunal material highlights the following scenario in which hunting tactics can be even more clearly defined. The pursuit of wild boar was the major objective of this occupation and numerous individuals (including many young) were brought back to the site. Furthermore, the need to quickly process all prey during several tightly spaced stopovers explains the density of remains. In regards to the diversity of animal resources, beaver owes its unusual over-representation to specific technical intentions, namely the procurement of its incisors. Species such as aurochs and red deer may have been segmented prior to their introduction to the site. The smallest species, represented by only a single incomplete specimen, may have resulted from trapping during the occupation of the site.

Zones associated with working flint or processing fauna are well-differentiated at locus 295. The internal organisation of the occupation appears as juxtaposed zones with a multifunctional area in the vicinity of the hearth. Flintknapping occurred alongside more specific activities such as the manufacture of projectile weapons, as well as numerous butchery activities probably involving the partial consumption of animal products *in situ* during the butchery process. Carcass processing took place on a much larger scale. A space dedicated to the dismemberment and segmentation of large mammals can be found on one side, while another zone for working flint and areas for more specialised tasks, especially concerning beaver, are found in more marginal positions.

This preliminary data seems to indicate a relatively short occupation where mainly hunting and butchery activities were carried out simultaneously with more domestic activities such as skin processing. Although the working of plant and osseous materials was demonstrated by use-wear analysis, they seem to have played a secondary role. The duration of the occupation does not seem to have been long enough to disturb the original organisation of the remains or blur the structuration of space. No evidence of fishing was recovered despite the site bordering a channel and having conditions favourable to the preservation of fragile elements such as fish remains. It therefore appears that the hunting of large terrestrial mammals was the main activity at the site. Furthermore, no traces of carbonised hazelnuts were recovered, which may however be related to the period of occupation as the paleodemographic composition of wild boar suggests a warm-season frequentation of the site.

**Acknowledgements:** We would like to thank Yolaine Maigrot for her help and discussions concerning the identification of processing techniques on beaver incisors.

## REFERENCES

- BIGNON O. (2008) – *Analyses taphonomiques du site mésolithique de Saleux « Les Baquets » : bilan général du locus 295*, conseil général de la Somme, 15 p.
- BRIDAULT A. (1994) – Les économies de chasse épipaléolithiques et mésolithiques du Nord et de l'Est de la France : nouvelles analyses, *Anthropozoologica*, 19, p. 55-67.
- BRIDAULT A. (1997) – Chasseurs, ressources animales et milieux dans le Nord de la France de la fin du Paléolithique à la fin du Mésolithique, in J.-P. Fagnart and A. Thévenin (eds.), *Le Tardiglaciaire en Europe du Nord-Ouest*, proceedings of the 119th Congrès annuel des sociétés historiques et scientifiques (Amiens, October 1994), Paris, CTHS, p. 166-176.
- CROMBÉ P. (1999) – Vers une nouvelle chronologie absolue pour le Mésolithique en Belgique, in A. Thévenin (ed.) and P. Bintz (dir.), *L'Europe des derniers chasseurs. Épipaléolithique et Mésolithique*, proceedings of the 5th UISPP International Conference, commission XII (Grenoble, 18-23 septembre 1995), Paris, CTHS, p. 189-199.
- CROMBÉ P., CAUWE N. (2001) – The Mesolithic, in N. Cauwe, A. Hauzeur and P.-L. Van Berg (eds.), *Prehistory in Belgium*, special issue on the occasion of the XIVth Congress of the UISPP = *Anthropologica et Praehistorica*, 112, p. 49-62.
- COUDRET P., FAGNART J.-P. (2004) – Les fouilles du gisement paléolithique final de Saleux (Somme), *Revue archéologique de Picardie*, 1-2, p. 3-17.
- COUDRET P., FAGNART J.-P. (2006) – Données préliminaires sur les habitats des groupes de la tradition *Federmesser* du bassin de la Somme, *Bulletin de la Société préhistorique française*, 103, p. 729-740.
- DUCROCQ T. (2009) – Éléments de chronologie absolue du Mésolithique dans le Nord de la France, in P. Crombé, M. Van Strydonck, J. Sergeant, M. Boudin and M. Bats (eds.), *Chronology and Evolution within the Mesolithic of North-West Europe, Proceedings of an International Meeting, Brussels, 2007*, Newcastle upon Tyne, Cambridge Scholars Publishing, p. 345-362.



DUCROCQ T., BRIDAULT A., COUTARD S. (2008) – Le gisement mésolithique de Warluis (Oise) : approche préliminaire, in J.-P. Fagnart, A. Thévenin T. Ducrocq, B. Souffi and P. Coudret (eds.), *Le début du Mésolithique en Europe du Nord-Ouest*, proceedings of the round-table (Amiens, 9-10 October 2004), Paris, Société préhistorique française (Mémoire, 45), p. 85-106.

FAGNART J.-P. (1997) – *La fin des temps glaciaires dans le Nord de la France. Approches archéologique et environnementale des occupations humaines au cours du Tardiglaciaire*, Paris, Société préhistorique française (Mémoire, 24), 270 p.

FAGNART J.-P., COUDRET P., SOUFFI B. (2008) – Les occupations mésolithiques du gisement de Saleux (Somme), in J.-P. Fagnart, A. Thévenin, T. Ducrocq, B. Souffi and P. Coudret (eds.), *Le début du Mésolithique en Europe du Nord-Ouest*, proceedings of the round-table (Amiens, 9-10 October 2004), Paris, Société préhistorique française (Mémoire, 45), p. 107-133.

GOB A. (1981) – *Le Mésolithique dans le bassin de l'Ourthe*, Liège, Société wallonne de paléontologie (Mémoire, 3), 358 p.

GUÉRET C. (2008) – *Tout en souplesse! Approche fonctionnelle de l'outillage du Mésolithique moyen du locus 295 de Saleux-Les Baquets (Somme)*, master 2 thesis, université Paris I, 78 p.

Olivier BIGNON-LAU

UMR 7041 « Ethnologie préhistorique »  
Maison René Ginouvès  
21 allée de l'Université  
92023 Nanterre cedex, France  
olivier.bignon@mae.u-paris10.fr

Paule COUDRET

Conseil général de la Somme et AEPS  
18 rue Dufour, 80 000 Amiens  
p.coudret@wanadoo.fr

Jean-Pierre FAGNART

Conseil général de la Somme  
54 rue Saint-Fuscien, BP 32 615  
80 026 Amiens cedex  
jp.fagnart@somme.fr

Bénédicte SOUFFI

UMR 7041 « Ethnologie préhistorique »  
INRAP Centre – Île-de-France  
34/36 avenue Paul Vaillant-Couturier  
93120 La Courneuve, France  
benedicte.souffi@inrap.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 Pale ethnography...’: 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 pale ethnographic 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.



Institut national  
de recherches  
archéologiques  
préventives



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

ISBN: 2-913745-51-2



9 782913 745513