



**HAL**  
open science

## Mesolithic occupations on the edge of the Seine. Spatial organisation and function of the site of 62 rue Henry Farman, Paris (15th arrondissement)

Bénédicte Souffi, Fabrice Marti, Christine Chaussé, Anne Bridault, Éva David, Dorothée Drucker, Renaud Gosselin, Salomé Granai, Sylvain Griselin, Charlotte Leduc, et al.

### ► To cite this version:

Bénédicte Souffi, Fabrice Marti, Christine Chaussé, Anne Bridault, Éva David, et al.. Mesolithic occupations on the edge of the Seine. Spatial organisation and function of the site of 62 rue Henry Farman, Paris (15th arrondissement). *Paethnographie du Mésolithique : recherches sur les habitats de plein air entre Loire et Neckar/ Actes de la table ronde de Paris, 27-27 novembre 2010, Nov 2010, Paris, France. pp.16-36. hal-01836227*

**HAL Id: hal-01836227**

**<https://hal.science/hal-01836227>**

Submitted on 1 Mar 2019

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# 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, Dorothee 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. 13–36  
[www.prehistoire.org](http://www.prehistoire.org)  
ISSN 2263-3847 – ISBN 2-913745-51-2 (on-line)

## Mesolithic occupations on the edge of the Seine

### Spatial organisation and function of the site of 62 rue Henry-Farman, Paris (15th arrondissement)

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

---

**Abstract:** The Mesolithic site of 62 rue Henry-Farman in the 15th arrondissement of Paris was found to the south-west of the city on the left bank of the Seine, approximately 250 m from the present course of the river. Excavations in 2008 over a surface of 5,000 m<sup>2</sup> produced a fluvial stratigraphic sequence containing numerous interstratified occupation levels. Excavations essentially focused on the Mesolithic occupation and exposed six spatially independent concentrations (loci) of archaeological material. Based on paleoenvironmental and techno-typological studies, together with radiometric dates, the assemblage can be attributed to the Boreal chronozone or to the Preboreal/Boreal transition and thus the middle phase of the Mesolithic (8000–6900 BC). The different loci correspond to successive occupations characterised by at least three typologically distinct assemblages, all of which are dominated by points with retouched bases (Beuronian). In functional terms, the different loci present evidence for various activities mainly focused on the manufacture of flint arrowheads, however the use of domestic tools in flint, sandstone and bone is also documented.

---

THE MESOLITHIC SITE of 62 rue Henry-Farman, Paris (15th arrondissement) was found to the south-west of the city on the Seine's floodplain, some 250m from the present course of the river (fig. 1). This open-air site is on the river's left bank and found in a similar geomorphological and geological context to Rueil-Malmaison 'Les Closeaux', located several kilometres further to the west (Lang, 1997; Walczak, 1998; Lang and Sicard, 2008).

#### EXCAVATION METHODS

Excavations at 62 rue Henry-Farman, Paris, were carried out in the framework of a rescue project by the INRAP in 2008. The extensive investigation of the level over 5,000 m<sup>2</sup> uncovered six spatially distinct loci (loci 1–6). Apart from locus 6, each locus was manu-

ally excavated with the pieces systematically plotted in three dimensions and by ¼ m<sup>2</sup> for locus 1. Time restraints meant that locus 6 had to be dug with the help of a mechanical digger, all pieces were however plotted in three dimensions. In general, the limits of the concentrations were not always reached, especially for loci 4 and 5, and manual excavations were generally abandoned when the number of pieces was less than 10 per m<sup>2</sup>. Beyond the limits of the manual excavations, surfaces exposed with the help of the mechanical digger permitted the recovery of more marginal pieces dispersed between the different loci. The sediment was not sieved due to its extremely clayey nature. However, tests were carried out in certain loci in order to evaluate any possible 'loss' which appeared to be fairly insignificant (between 3 and 10 artefacts per 20 litres of sediment). Almost 7,000 chips (less than 1–1.5 cm) were also manually collected by ¼ m<sup>2</sup> over the entirety of the site.

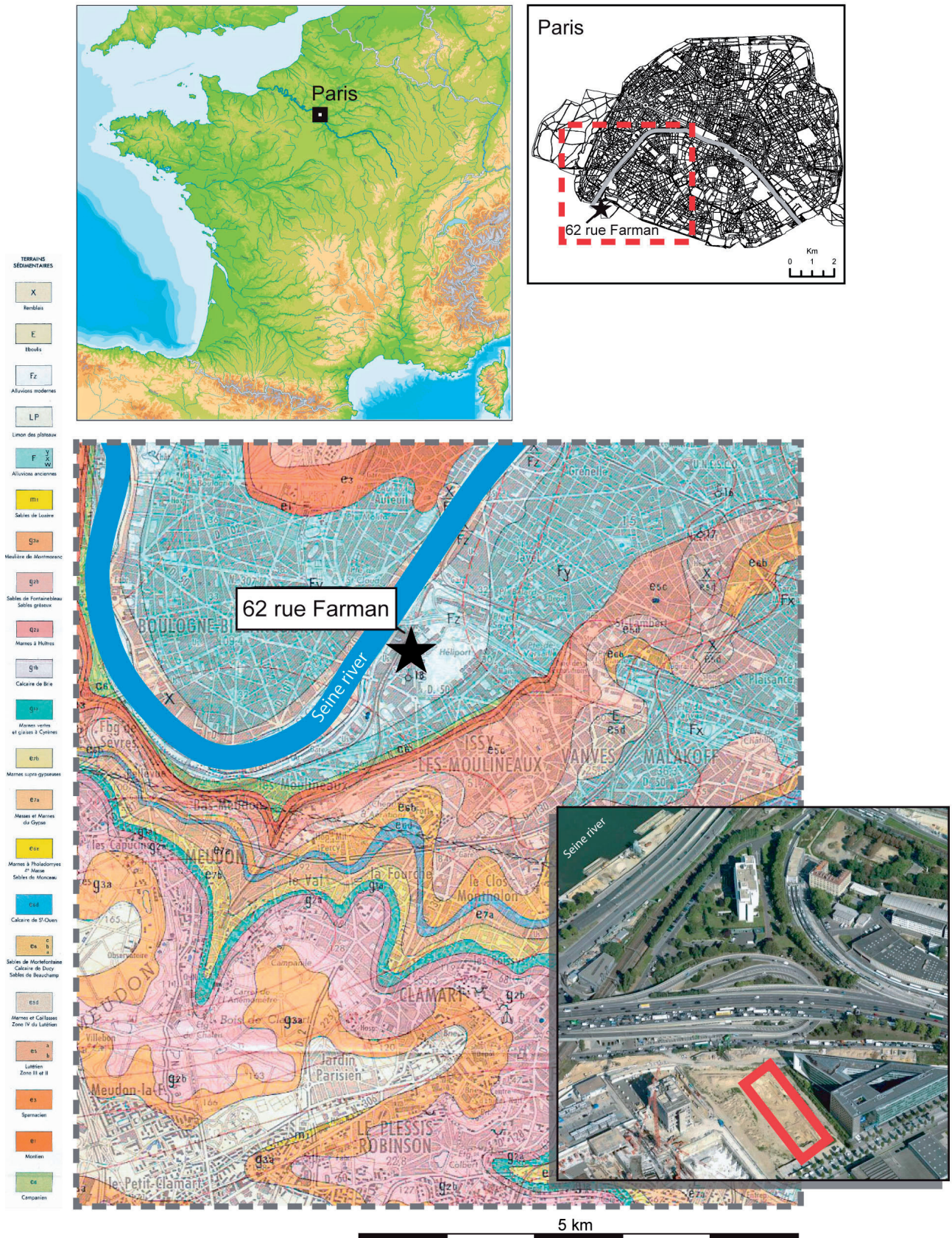


Fig. 1 – 62 rue Henry-Farman, Paris. Location of the Mesolithic site (graphic design B. Souffi after IGN 1/150000).

## STRATIGRAPHY AND TAPHONOMY

The exposed fluvial stratigraphy yielded several occupation levels including a Neolithic occupation overlying the Mesolithic level (fig. 2). All of the Mesolithic material was recovered from a single sedimentary unit containing a brown-orange clay that was siltier at its base (bed 5). The geomorphological study carried out by C. Chaussé (*in Souffi and Marti, 2011*) demonstrated that this pedological horizon developed slowly and is characteristic of a period of relative environmental stability. In taphonomic terms, alongside numerous episodes of bioturbation, a low-energy erosion event involving superficial surface wash can be seen in the upper part of the level. This colluviation could be connected to the soil's destabilisation following the Neolithic occupation that began during the Late Atlantic. Its impact on the Mesolithic remains, in terms of the movement of artefacts, seems however moderate taking into account the gentle north-west/south-west slope. The vertical redistribution of the Mesolithic remains, linked to numerous instances of animal or vegetal bioturbation, can be seen over a depth of between 20–30 cm.

The ridges and edges of the worked flint are generally fresh with certain pieces displaying a whitish patina resulting from a superficial desilicification, while others patinated when unearched. The different origins of the worked materials (alluvial, sometimes gelifracated, flint cobbles) explains this physical variability. Faunal remains are often corroded in association with relatively significant manganese surface deposits. Furthermore, they suffered substantial post-depositional breakage perhaps connected to the volume of modern backfill at the summit of the stratigraphic sequence.

## ENVIRONMENT AND DATING

Different paleoenvironmental studies—geomorphological (C. Chaussé), malacological (S. Granai) and isotopic (D. Drucker)—concerning the Mesolithic level indicate a relatively open, dry prairie type environment with some open woodlands (fig. 3). This type of landscape seems characteristic of the Boreal chronozone contemporaneous with the middle phase of the Mesolithic (9000–7800 BP or 8000–6900 cal BC) in the northern half of France (Ducrocq, 2001).

Although the 1,300 faunal remains seemed promising for numerous radiocarbon dates, preliminary isotopic analyses (D. Drucker) indicated low, poorly preserved quantities of bone collagen, thus limiting the possibility of obtaining reliable dates. Furthermore, no burnt hazelnut shells were recovered from the site that could alleviate this difficulty. The quantitative and qualitative preservation of organic material was evaluated for some twenty osseous pieces, including worked deer antler and human remains. Only three faunal samples, all from

locus 4, furnished enough collagen to fulfil the reliability criteria for measuring radiocarbon, in other words, a C/N ratio between 2.9 and 3.6, as well as a carbon content of at least 30% (Deniro 1985; Ambrose 1990). Only two dates have so far been obtained, although a second sample selection is in progress (fig. 4); one on a aurochs metatarsal ( $9285 \pm 40$  BP, 8633–8421 cal BC: GrA-45018), and another on a wild boar humerus ( $8805 \pm 40$  BP, 8005–7727 cal BC: GrA-45017). These remains were recovered from the same sector and place the Mesolithic remains within bed 5 to the beginning of the Boreal chronozone or the Preboreal/Boreal transition. This attribution is in accordance with the environmental studies discussed above, as well as the techno-typological aspect of the lithic industry associated with a predominantly wild boar faunal spectrum.

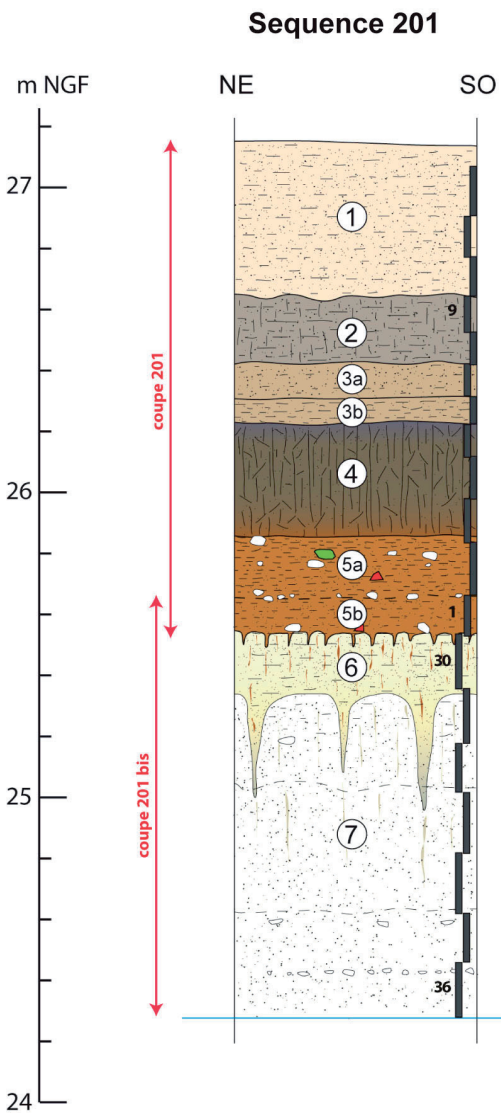
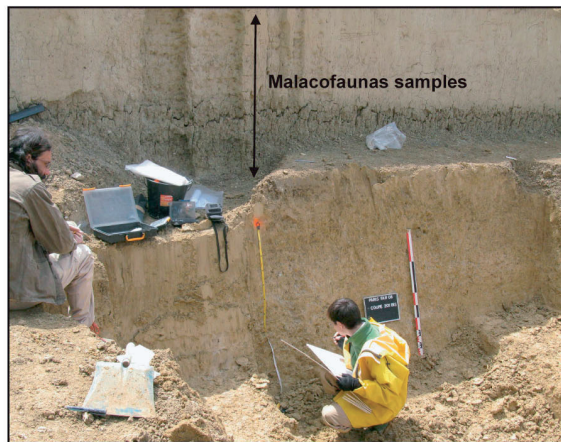
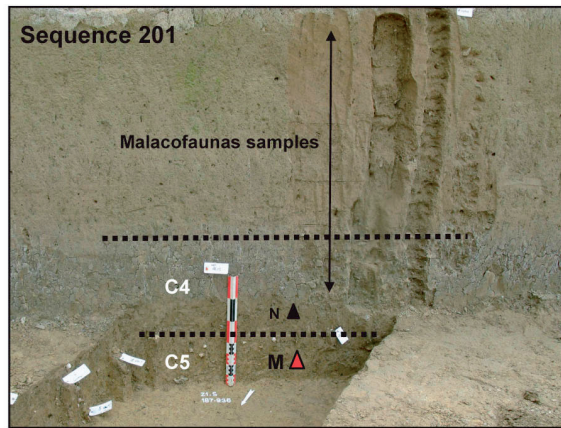
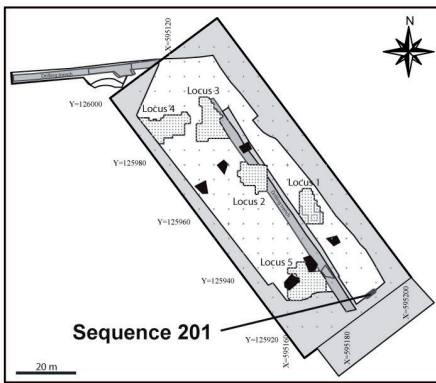
## ARCHAEOLOGICAL REMAINS

As features were rare, the material recovered during excavations is essentially comprised of lithic and osseous artefacts. The six excavated loci produced a little more than 25,000 pieces including chips (fig. 5). Locus 5 (108 m<sup>2</sup>) was the most dense area containing almost 6,500 pieces, not including chips, followed by loci 1 (73 m<sup>2</sup>) and 2 (76 m<sup>2</sup>) with respectively 3,965 and 3,899, not including chips. The most northern loci in the exposed area were the poorest: locus 3 (97 m<sup>2</sup>) produced 2,142 pieces (not including chips) and only 812 pieces (not including chips) were collected from locus 4 (103 m<sup>2</sup>). Bearing in mind the excavation conditions, the quantitative data from locus 6 is biased as all the material could not be entirely collected.

### Artefacts

The loci are mainly composed of worked flint connected to the production of bladelets resembling the Coincy style from which microlithic arrowhead elements were manufactured (Rozoy, 1968). The microliths recovered from the different loci are characteristic of the middle phase of the Mesolithic (fig. 6) and, more precisely, the first half of the Boreal (Ducrocq, 2001; Séara et al., 2002; Séara, 2000 and 2008). Points with retouched bases are present in all loci, however isosceles triangles were only recovered from locus 3 and their association with several obliquely truncated points suggests that this locus can be attributed to an older phase of the Mesolithic. Crescents and points with retouched bases dominate the material from locus 2 and are equally well-represented in loci 1 and 5 where they are associated with scalene triangles and points with retouched bases. No element attributable to the Late Mesolithic was found on the site. The production of bladelets for microliths also includes the manufacture of domestic tools, generally on waste products from the shaping-out or management of cores (flakes).





- 1 - beige sandy loam
- 2 - brownish/beige clayey loam
- 3 - beige clayey sandy loam
- 4 - greyish loamy clay
- 5 - orangish-brown clay
- 6 - yellow loamy sand
- 7 - greyish clayey sandy loam

- Ceramic artefact
- ▲ Lithic artefact
- Malacofaunas samples

- H** Hallstatt
- PC** Final Neolithic/Early Bronze age (Post-Campaniforme)
- N** Middle Neolithic
- M** Mesolithic

Fig. 2 – 62 rue Henry-Farman, Paris. Profile 201 (photos and graphic design B. Souffi after C. Chaussé).

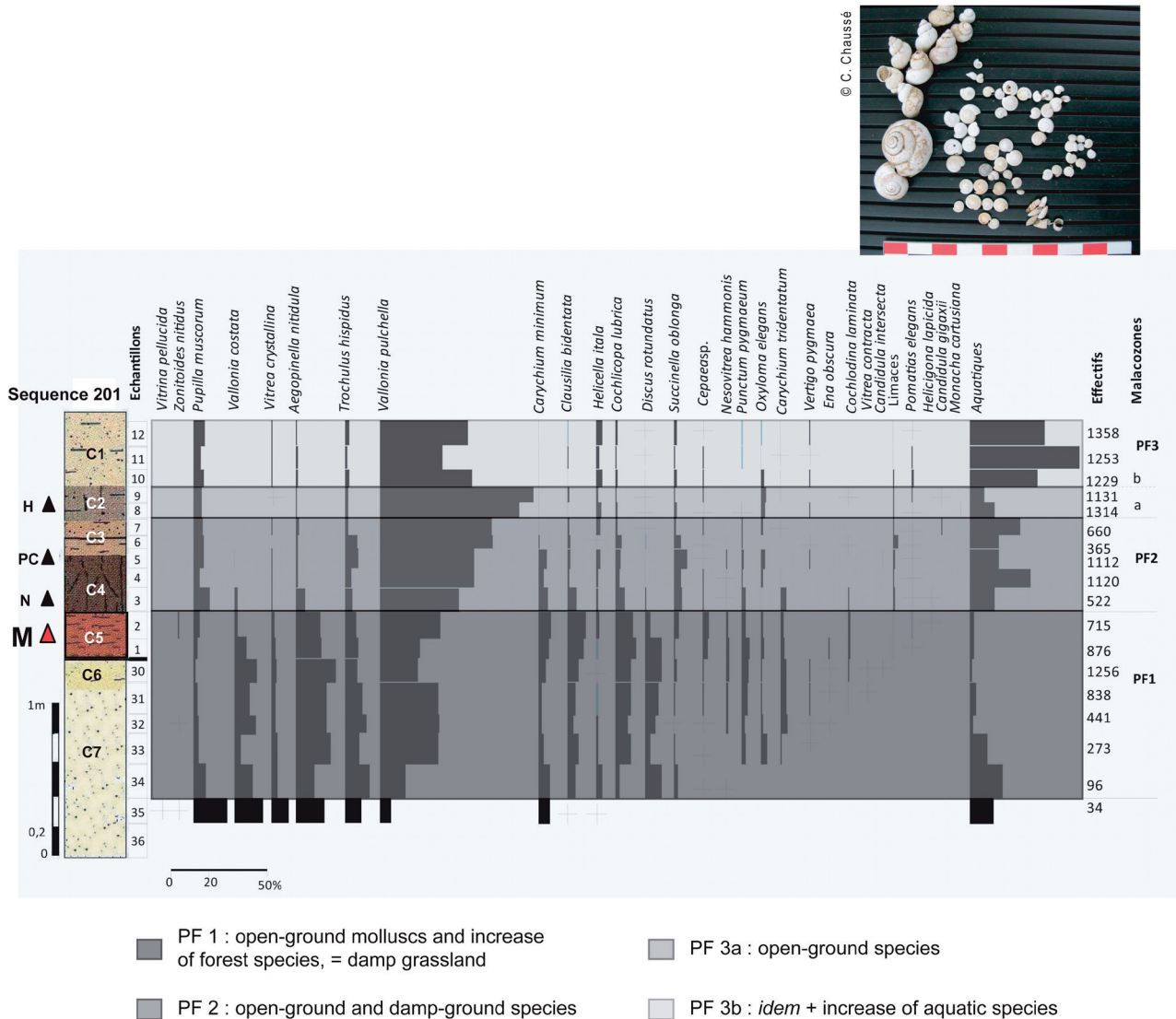


Fig. 3 – 62 rue Henry-Farman, Paris. Malacological diagram for profile 201 (graphic design B. Souffi, INRAP, after S. Granai).

This Parisian site is also characterised by a significant collection of 193 quartzite pieces essentially comprised of finished tools discarded after use or during repair. These pieces are present in all the loci and the majority are Montmorencian prismatic tools made on quartzite (fig. 7). This quartzite seems to come from local outcrops at a maximum distance of approximately 10–20 km and is represented by 24 objects corresponding to 21 units of which seven are whole. These pieces are trapezoidal or triangular in cross-section and their narrow and elongated morphology systematically preserves a flat surface (Griselin et al., this volume). The broken pieces probably result from unintentional fractures produced during the repair or use of these objects. The presence of several quartzite flakes demonstrates that these objects were repaired on-site. Use-wear analysis shows that they bear traces of wear preferentially localised along the ridges on the tool’s flat surface suggesting contact with a hard min-

eral material (study by C. Hamon). These objects have also been recovered from the sites of Rueil-Malmaison ‘Les Closeaux’, Hauts-de-Seine, and Neuville-sur-Oise ‘Chemin Fin-d’Oise’, Val d’Oise (Souffi, in prep.) and seem to be generally characteristic of the middle phase of the Mesolithic in the Île-de-France region (Griselin, 2010 and this volume). Additionally, two grooved abraders (cf. grooved sandstone) were recovered from loci 1 and 2. A functional study carried out by C. Hamon indicates that they were probably used for the sharpening and maintenance of osseous tools by abrasion. The collection of sandstone also contains 14 small polished quartzitic sandstone slabs with a substantial siliceous component. These small sub-quadrangular slabs are thin (1.5–3 cm), were rarely shaped and present only one flat working surface that, according to the functional study (C. Hamon), served to work hard mineral material.

Wild boar dominates the osseous remains and is accompanied to a lesser extent by deer, fox and roe deer

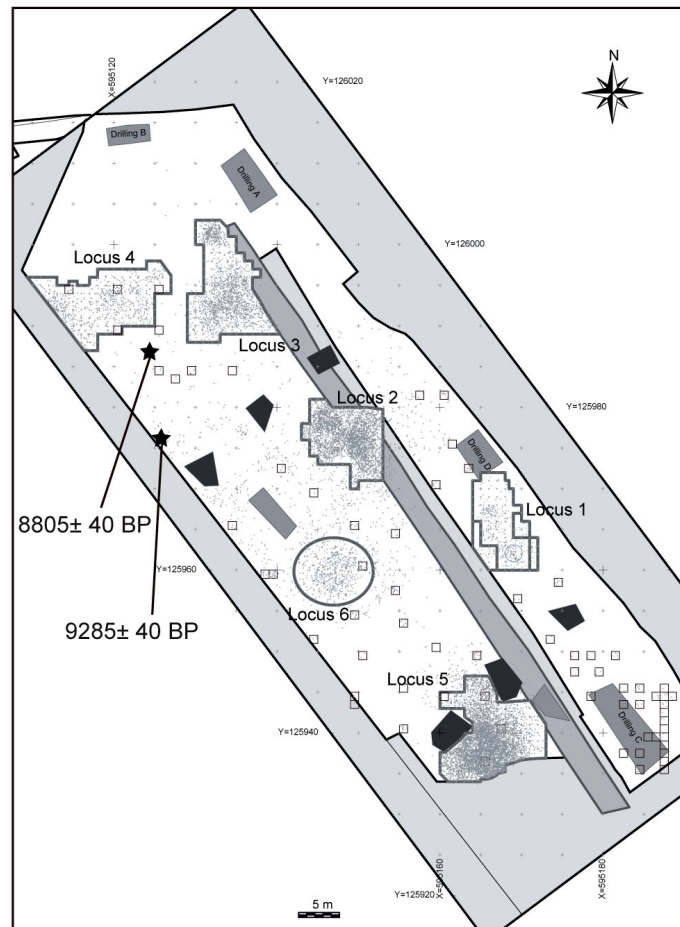
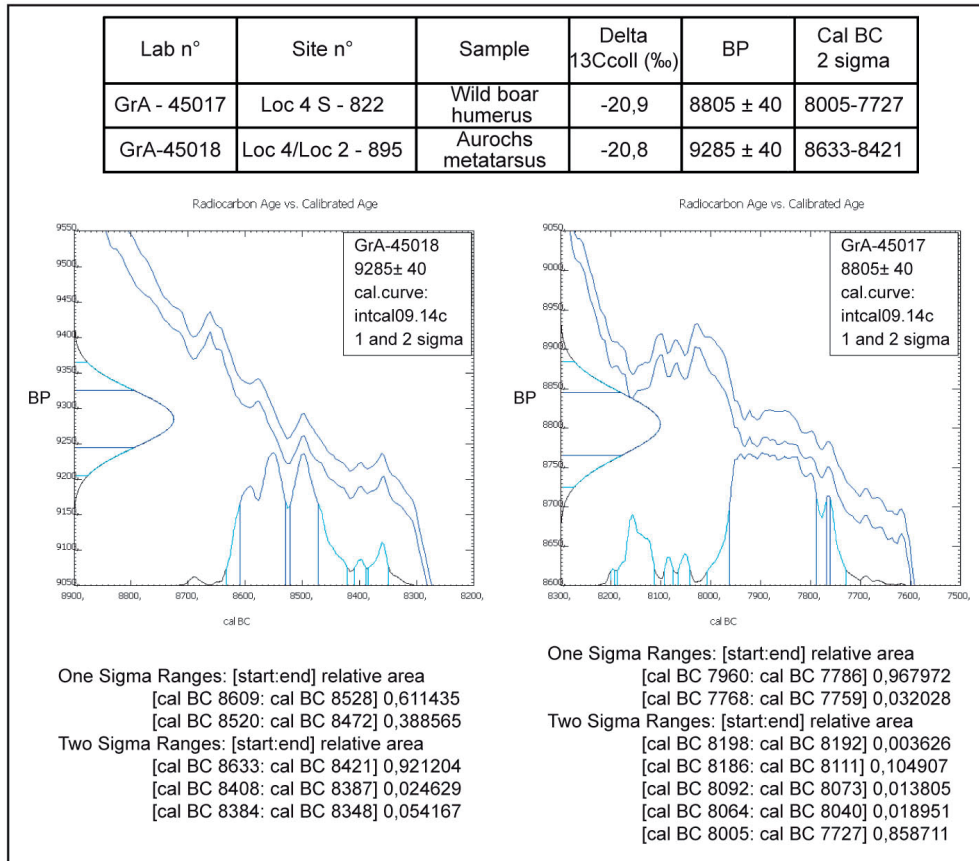


Fig. 4 – 62 rue Henry-Farman, Paris. <sup>14</sup>C Dates (calibration CALIB.REV.6.0).

	Locus 1		Locus 2		Locus 3		Locus 4		Locus 5		Locus 6		Total
Excavated surface	60 m <sup>2</sup>		75 m		98 m <sup>2</sup>		101 m <sup>2</sup>		108 m <sup>2</sup>		70 m <sup>2</sup>		512 m <sup>2</sup>
Faunal material	479	12,08%	294	7,55%	167	7,80%	68	8,40%	247	3,80%	33	4%	1288
Osseous industry	4	0,12%	2	0,05%	1	0,04%	1	0,10%	3	0,05%	0		11
Microliths	69	1,70%	67	1,70%	36	1,70%	7	0,90%	119	1,80%	3	0,40%	301
Microliths drafts	12	0,30%	12	0,30%	6	0,30%	1	0,10%	29	0,40%	2	0,24%	62
Microburins	57	1,40%	57	1,50%	41	1,90%	3	0,40%	39	0,60%	2	0,24%	199
Flint tools	96	2,40%	102	2,60%	58	2,70%	24	3%	137	2,10%	21	2,60%	438
Flint macroliths	0	0	8	0,20%	3	0,14%	1	0,10%	5	0,07%	2	0,24%	19
Sandstone macroliths	12	0,30%	4	0,10%	4	0,20%	7	0,90%	10	0,15%	5	0,60%	41
Sandstone flakes	6	0,15%	5	0,1	22	1	80	9,80%	20	0,30%	0	0	133
Blades	106	2,70%	194	5%	41	1,90%	26	3,20%	205	3,10%	51	6,20%	623
Bladelets	491	12,33%	640	16,44%	179	8,34%	76	9,30%	693	10,70%	118	14,24%	2197
Flakes	2285	57,63%	2117	54,30%	915	42,70%	363	44,70%	4544	69,90%	454	55%	10678
Cores	145	3,65%	153	3,90%	69	3,20%	51	6,30%	157	2,40%	62	7,65%	636
Block fragments	177	4,50%	175	4,50%	313	14,60%	56	6,90%	179	2,80%	55	6,70%	955
Flint pebbles	14	0,35%	21	0,53%	117	5,50%	23	2,80%	11	0,20%	12	1,50%	198
Other stones	7	0,18%	26	0,60%	42	2%	17	2,10%	36	0,60%	5	0,60%	133
Tertiary shell (personal ornaments)	0	0	2	0,05%	1	0,04%	1	0,10%	5	0,07%	0	0	9
Colouring agent (kaolinite)	3	0,07%	21	0,50%	0	0	4	0,50%	64	1%	0	0	92
<b>Total without splinters</b>	<b>3965</b>		<b>3899</b>		<b>2142</b>		<b>812</b>		<b>6503</b>		<b>824</b>		<b>18145</b>
Splinters	1573	28,40%	1416	26,70%	453	17,50%	204	20,10%	3614	35,70%	8	1%	7268
<b>Total</b>	<b>5538</b>		<b>5315</b>		<b>2595</b>		<b>1016</b>		<b>10117</b>		<b>832</b>		<b>25413</b>

Fig. 5 – 62 rue Henry-Farman, Paris. Artefact counts for the six loci.

(study by C. Leduc and A. Bridault in Souffi and Marti, 2011). Locus 2 is set apart by a larger diversity of species (aurochs, hare, pine marten, badger and tortoise). Locus 1 is characterised by the presence of a well-defined faunal discard zone containing almost 160 pieces spread across approximately 6 m<sup>2</sup>. The identifiable species from this locus are essentially wild boar and deer. The faunal fragments, certain which were in anatomic connection, correspond to less meat bearing elements such as the lower posterior and anterior limbs, a portion of the vertebral column and a skull. Five loci produced elements of an industry in hard animal materials (finished tools and waste products) including three bone point fragments, two from locus 1 and the other from locus 3, two worked deer antlers from locus 5 and, finally, three worked wild boar canine teeth from loci 2, 4 and 5 (study by É. David, fig. 8). One of the deer antlers has a beveled end opposite an end with a hammered aspect. These observations suggest this piece might have functioned as a splitting 'wedge' for woodworking. Similar objects

were recovered from the sites of Noyen-sur-Seine, Seine-et-Marne (David 2004) and Chaussée-Tirancourt, Somme (Ducrocq 2001). Among the three bone point fragments, the morpho-technical characteristics of the specimen from locus 3 resembles examples from different sites in the Île-de-France region such as Noyen-sur-Seine (bed 9-sup, Lower Atlantic: David, submitted) and Rueil-Malmaison 'Les Closeaux' (sector I dated to the 2nd half of the Boreal: Lang and Sicard, 2008).

Osseous artefacts from the Paris site also include two human remains discovered in locus 1 but not within a feature—a fragment of a femur and a mandible from a single adult individual. (study by F. Valentin in Souffi and Marti 2011).

Nine shells representing Tertiary marine fossils belonging essentially to Lutetian geological deposits (study M. Vanhaeren) were also recovered from loci 2, 3, 4 and 5 (*Fustiaria suburnea*, *Crommium* sp., *Bayania lactea*, *Vivincerithium* sp., smooth *Antalis* sp. and *Glycymeris* sp.). Certain of these objects could represent

	Locus 1		Locus 5		Locus 2		Locus 3		Locus 4	
Obliquely truncated points	5	7.2 %	14	11.8 %	10	15 %	11	30.5 %	1	1 %
Points with retouched bases	15	21.7 %	21	17.6 %	11	15 %	5	13.9 %	0	0
Atypical points	0	0	0		1	1.4 %	0	0	0	0
Crescents	13	18.8 %	37	31.1 %	29	43.3 %	4	11.1 %	1	1 %
Scalene triangles	19	27.5 %	27	22.7 %	7	12 %	2	5.6 %	0	0
Isoscele triangles	2	3 %	0	0	2	3 %	7	18.4 %	2	2 %
Backed bladelets	0	0	1	0.8 %	0	0	0	0	0	0
Trapezes	3	4.3 %	0	0	0	0	0	0	0	0
Bitroncatures	2	2.9 %	0	0	0	0	0	0	0	0
Indeterminate fragments	10	14.5 %	19	16 %	7	10.5 %	7	18.4 %	3	3 %
<b>Total</b>	<b>69</b>		<b>119</b>		<b>67</b>		<b>36</b>		<b>7</b>	
<b>% of all artefacts</b>		<b>1.7 %</b>		<b>1.8 %</b>		<b>1.7 %</b>		<b>1.7 %</b>		<b>0.7 %</b>
Microliths drafts	13		25		12		6		1	
Microburins	57	1.4 %	39	0.6 %	57	1.5 %	41	1.9 %	3	0.3 %

Fig. 6 – 62 rue Henry-Farman, Paris. Typological counts of microliths from the six loci.

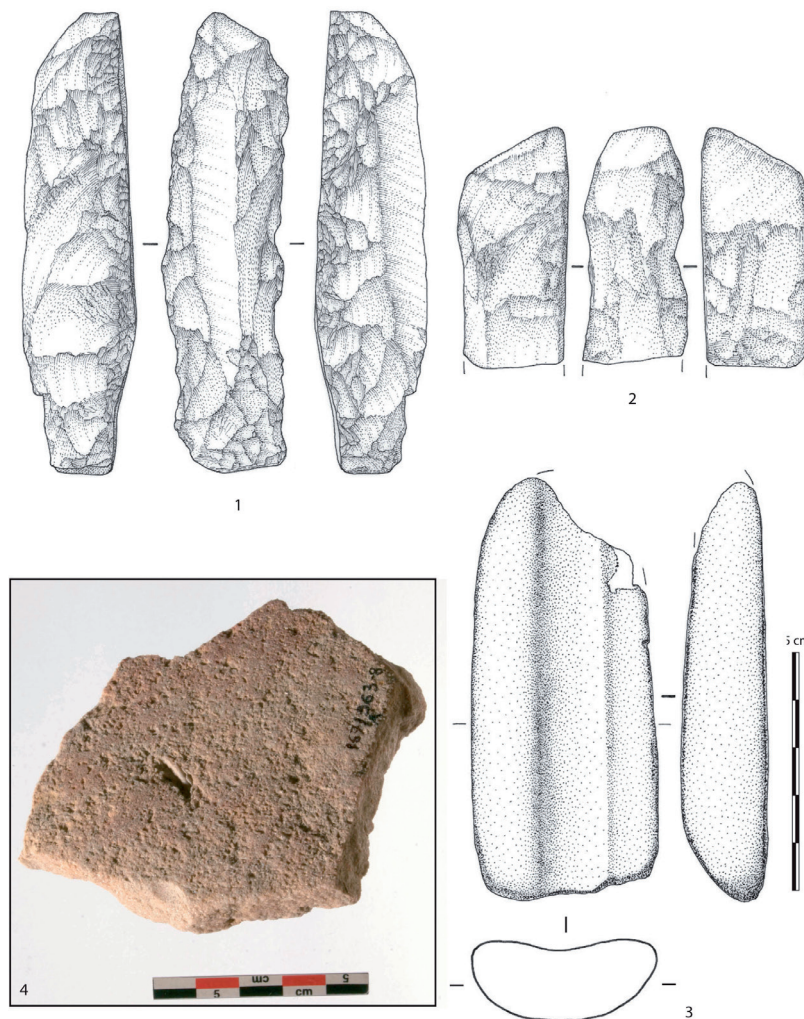


Fig. 7 – 62 rue Henry-Farman, Paris. Quartzite tools. 1–2: locus 3, Montmorencian prismatic tools; 3: locus 1, grooved abradar; 4: locus 1, small polished slab (drawings E. Boitard-Bidaut, INRAP; photo L. Petit, INRAP).



Fig. 8 – 62 rue Henry-Farman, Paris. Industry in hard animal material. 1: locus 3, bone point; 2: locus 1, bone point; 3: locus 5, beveled deer antler-splitting wedge (photos É. Davis, CNRS).

ornaments as such species are infrequent or naturally absent from floodplain deposits such as those at rue Farman.

Four loci (1, 2, 4 and 5) also produced fragments of a red mineral colorant. This material is a kaolinite clay concretion that occurs naturally in the alluvia of certain rivers in the Paris Basin (N. Le Maux *in Souffi and Marti, 2011*). However, at Paris-Farman their near systematic, well-isolated central position in the different loci seems to exclude a natural origin.

### Features

Only one hearth and seven clusters of unmodified flint cobbles were noted on the site. The hearth associated with locus 3 is off-centre with respect to the main concentration of worked flint (fig. 9). This simple semi-circular surface feature is composed of numerous small-sized gravels (less than 5 cm), broken and complete flint cobbles, as well as calcareous stones or millstones, all of which were heated and lay flat over an area of approximately 4 m<sup>2</sup>. The absence of charcoal and traces of rubification perceptible to the naked eye initially suggested the cleaning of a hearth, however the micromorphological analysis ultimately revealed *in situ* combustion (J. Watez *in Souffi and Marti, 2011*).

Seven concentrations of un-modified, non-heated cobbles with diameters ranging between 40 and 130 cm were discovered in the periphery and within four loci (fig. 10). In four cases (loci 1, 3, St. 965 and St. 968) they were contiguous and/or superimposed clusters of occasionally tested cobbles. The morphologies and qualities of these cobbles are comparable with the knapped blocks from the local alluvia and could correspond to raw material 'reserves'.

### RELATIONSHIPS BETWEEN LOCI

Certain variants can be observed between the six loci in terms of the representation of different types of remains (fig. 11). Locus 4 produced the most quartzite artefacts and is set apart from the others by a low proportion of microliths, a greater number of prismatic tools ( $n = 5$  fragments) and the presence of quartzite flakes ( $n = 80$ ). It is conceivable that this 'specialised' locus may have complemented nearby locus 3 (approximately 5 m away) that also contains a large number of prismatic tools ( $n = 4$  fragments). The microlith assemblage from locus 3, more substantial than locus 4, is dominated by points with truncated bases and isosceles triangles (fig. 6 and 12). When compared with several recent discoveries of similar assemblages (Séara, 2000; Séara *et al.*, 2002; Lang and Sicard, 2008; Séara, 2008), an attribution of locus 3 to the beginning of the Boreal or the Preboreal/Boreal transition appears plausible and fits with the date obtained for the south of locus 4 (GrA-45017:  $8805 \pm 40$  BP, 8633–8421 cal BC). This assemblage

could depict an influence of southern Beuronian A traditions as defined for the Upper Danube (Taute *in Gob, 1984*, p. 201–202; Séara, 2000).

On the other hand, locus 2 seemed to have functioned independently from the other loci. Given that its microlith assemblage is dominated by points with retouched bases and crescents (fig. 6 and 14), it resembles the north-western Beuronian A as defined for Northern France and placed in the Boreal chronozone (Ducrocq, 2001 and 2009; Fagnart *et al.*, 2008).

Three refitted polished slab fragments from loci 1, 5 and 6 suggest the possible contemporaneity of the three concentrations, even if for the moment no other refits support this hypothesis. A complementary connection between the loci is however reinforced by the fact that the small polished slabs are found only in these three loci and that loci 1 and 5 have comparable microlith assemblages (fig. 6 and 13). These two loci are dominated by crescents, scalene triangles and points with retouched bases which could denote affinities with Eastern France where the first half of the Boreal sees the development of points with transverse base, scalene triangles and crescents associated with the Beuronian (see Séara, 2010; Séara and Roncin, this volume). These two loci also produced the most elements of an industry in hard animal materials (fig. 5).

### INTERNAL FUNCTION OF THE LOCI: THE CASE OF LOCI 2 AND 5

Within each locus, refits, together with a spatial analysis of the artefacts, revealed a certain functional coherence, as can be seen in the examples of loci 2 and 5. The area exposed between the two loci does however demonstrate a certain diffusion of remains outside the excavated space.

Locus 2, excavated over 75 m<sup>2</sup>, is composed of two concentrations (fig. 15). However, the fact that pieces were collected at the mechanical digger outside the manually excavated zone demonstrates that this locus was substantially larger. One of the two concentrations is found in the western part of the excavated zone (concentration A), while the other is situated more to the east (concentration B). The two assemblages are typologically comparable and refits suggest a complementary relationship between the two concentrations (fig. 16). Cores, not illustrated here, have a relatively diffuse distribution within each of the concentrations. The distribution of the domestic tools are particularly localised in the southern part of concentration B, while concentration A contains the majority of endscrapers (fig. 17). Use-wear analysis carried out by R. Gosselin confirms the several tools were used from each concentration for working skins, meat or hard animal materials. Locus 5 was excavated manually over 108 m<sup>2</sup>. Unfortunately, the southern limits of this concentration were not reached as the locus extended beyond the exposed zone (fig. 18). The significant quantity of remains and the absence of dates make it difficult

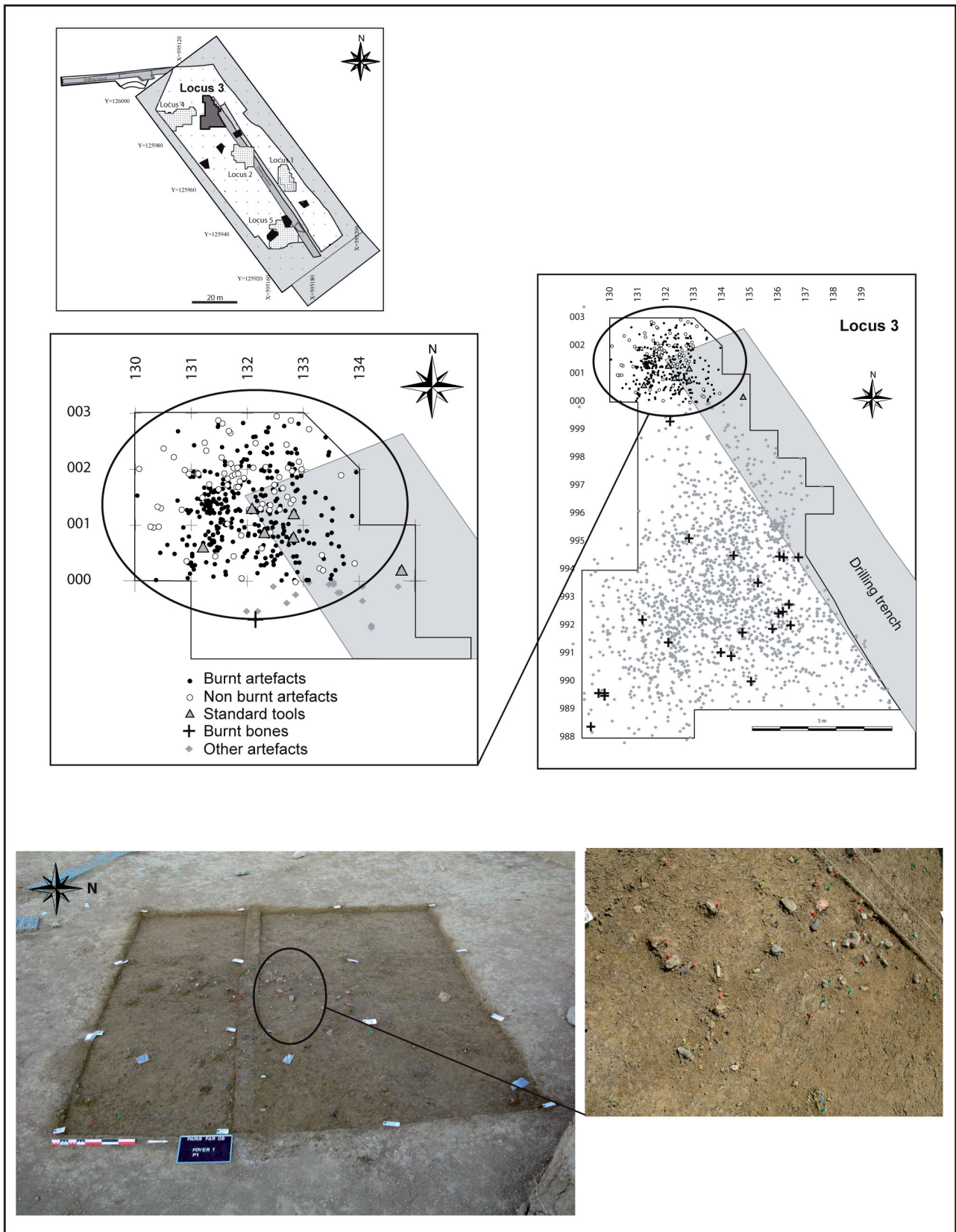


Fig. 9 – 62 rue Henry-Farman, Paris. Locus 3: hearth (photos and graphic design B. Souffi).



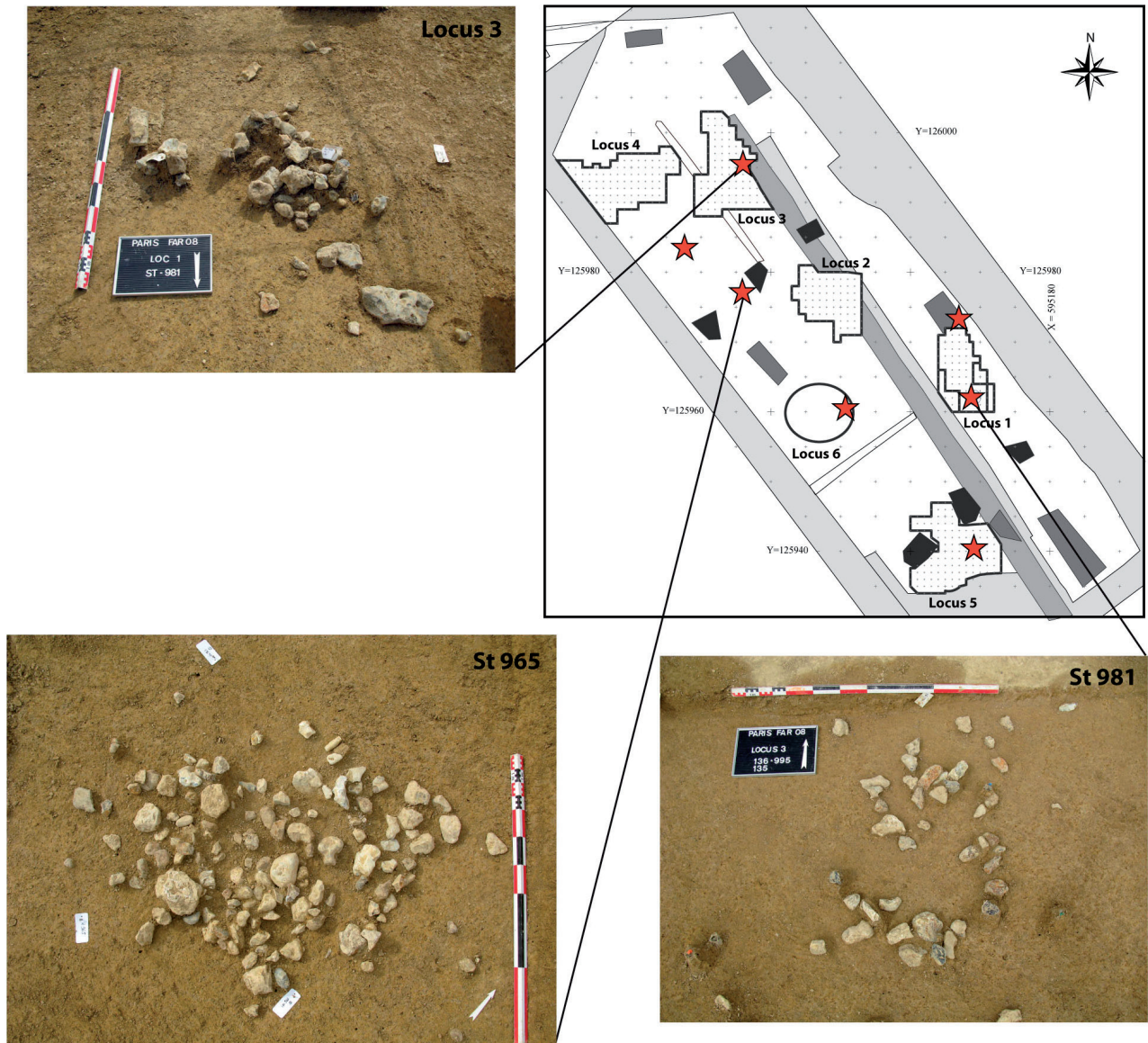


Fig. 10 – 62 rue Henry-Farman, Paris. Concentrations of un-modified flint cobbles (photos and graphic design B. Souffi).

to establish their absolute contemporaneity. However, despite an apparent uniformity in the general distribution of the material, several well-isolated elements indicate a certain spatial organisation. Chips, microburins, refitted pieces and retouched bladelets define a zone of maximal density at the centre of this locus (fig. 18). On the other hand, quartzite and millstone artefacts, as well as domestic tools, particularly scrapers and retouched blades, are off-centre in respect to this density zone and are essentially distributed along its perimeter (fig. 19)

### PRELIMINARY FUNCTIONAL INTERPRETATION

Given the density of material recovered from each locus and the Minimum Number of Individuals

(MNI) for each hunted species, the Mesolithic concentrations at Paris-Farman appear to represent short-term occupations. The identified activities relate to the acquisition and processing of game. In terms of acquisition, the on-site rearmament of arrows is clearly attested to by the numerous characteristic waste products. The function of the bone points from loci 1 and 3 remains unknown, although it is very likely that these objects were connected to hunting or fishing. It should be noted that for the moment no fish remains have been recovered from the site. Similarly, there exists no indirect evidence for the manufacture of arrow shafts or bows: tools with use-wear demonstrate little evidence of working vegetal materials (10% of 55 pieces bearing use-wear, study by R. Gosselin *in* Souffi and Marti, 2011). Only the presence of a beveled deer antler from locus 5, which may have served as an intermediary for splitting dry wood, suggests the working of vegetal materials. The processing of game also left very

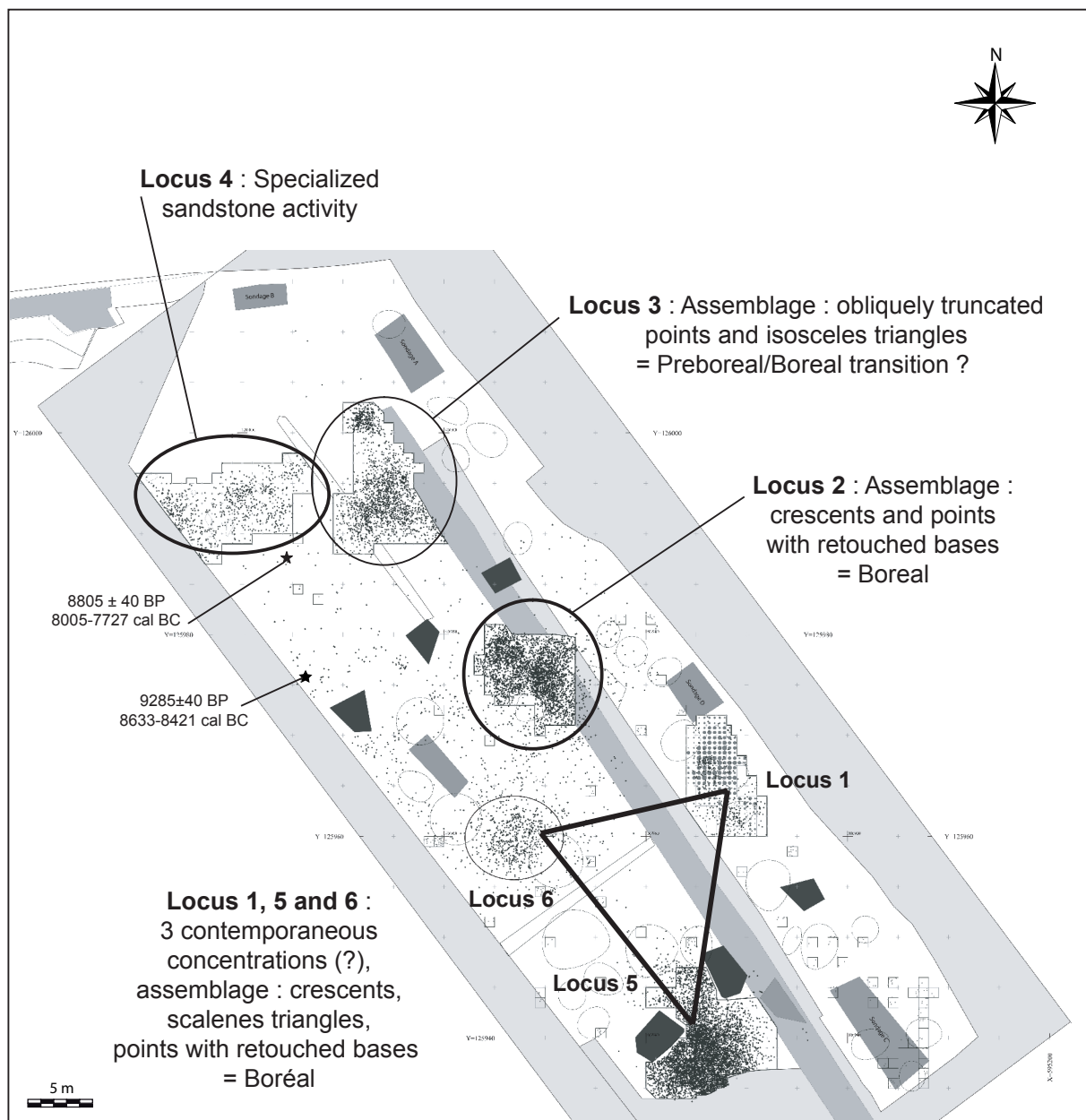


Fig. 11 – 62 rue Henry-Farman, Paris. Functional organisation of the site (graphic design B. Souffi).

few explicit traces. The poor bone surface states meant that marks referable to butchery are rare—only three specimens preserved cut-marks. At the same time, meat processing is represented on 16% percent of the domestic tools having traces of use ( $n = 55$ , study by R. Gosselin in Souffi and Marti, 2011). This analysis demonstrates an especially high representation of skin working particularly in loci 1, 3 and 5, sometimes in association with the use of an abrasive (37% of pieces portraying use-wear). Fragments of colorant (kaolinite) recovered from the site could also be linked to the processing of skins (see Philibert, 1993; Gosselin, 2005). However, this material could

equally have been used in the hafting of tools, perhaps functioning as a degreasing agent for the production of glues (Philibert, 2002).

As suggested by use-wear analysis carried out on certain flint tools, the working of bone (19% of pieces bearing traces of wear) seems to have taken place in certain loci, but always in relatively low proportions. Furthermore, the presence of grooved quartzite in loci 1 and 2, probably connected to the abrading of bone objects, raises questions concerning the on-site manufacture of polished points such as those from loci 1 and 3 (David, 2004).

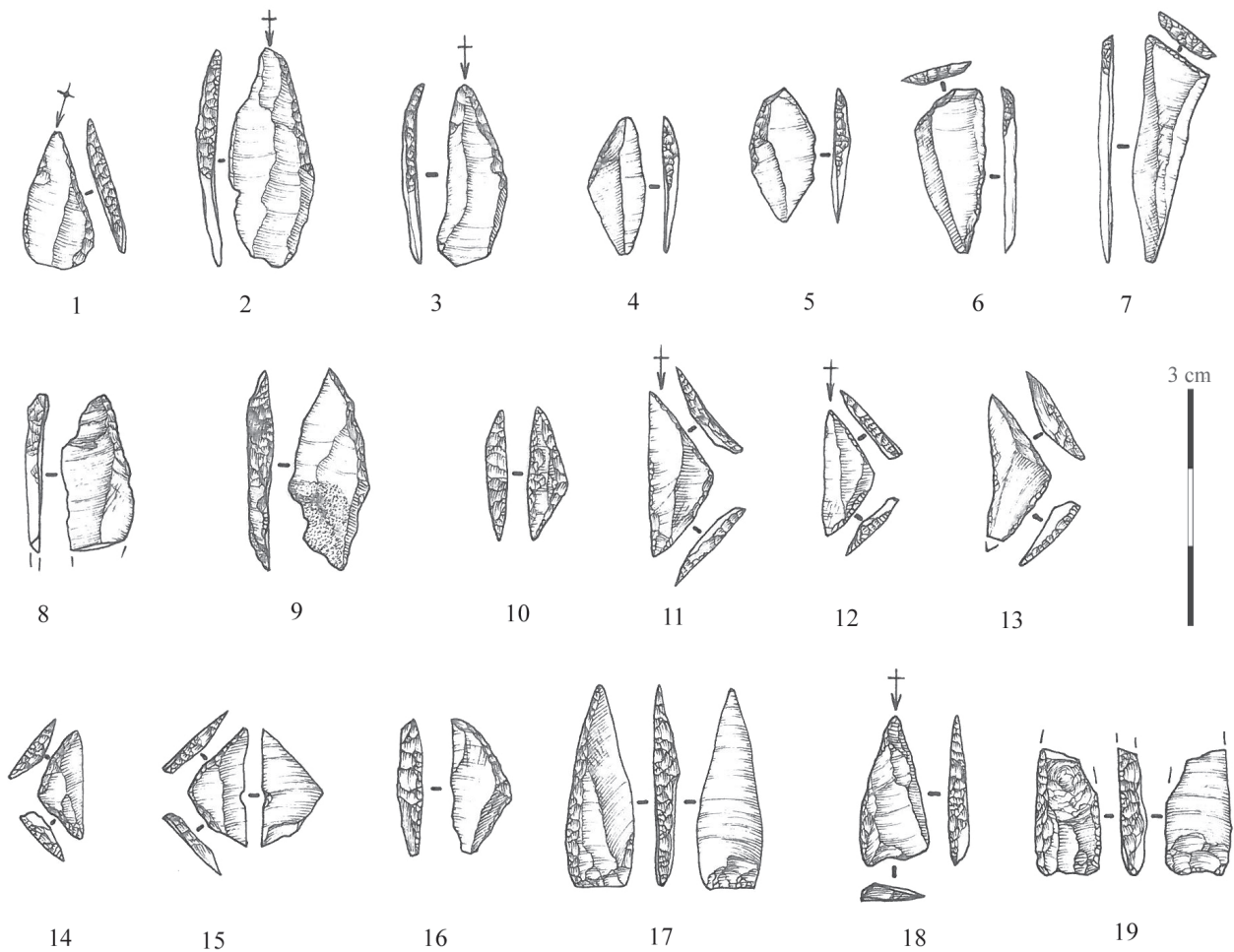


Fig. 12 – 62 rue Henry-Farman, Paris. Locus 3: microliths. 1–9: obliquely truncated points; 10–16: isosceles triangles; 17–19: points with retouched bases (drawings E. Boitard-Bidaut, INRAP).

## CONCLUSION

Extensive excavations at 62 rue Henry-Farman resulted in the discovery of six loci. Taking into consideration different investigations carried out in the vicinity of the site (see Watrin, 1996), it was possible to evaluate the overall extension of the Mesolithic occupation. This occupation, spread over a sector of approximately two hectares, is comparable to several other open-air sites recently discovered on valley floors (Séara *et al.*, 2002; Séara, 2010; Ducrocq *et al.*, 2008; Coutard *et al.*, 2010). The six loci exposed at the Paris-Farman site essentially represent ‘activity units’ such as those defined by F. Séara (2000). However, living spaces *sensu stricto* (sleeping areas, domestic hearths) were not identified on the site, although it is possible that they were not preserved (ephemeral constructions or perishable materials) or that these spaces were situated between the loci, in other words, outside the

exposed and excavated zone. On the Paris-Farman site, the near total absence of hearths, rarely observed on other open-air sites, remains difficult to explain: could it be connected to the season of occupation, the lack of preservation of this type of feature or even the function of these types of units? From a cultural point of view, although the loci as a whole seem to belong to the middle phase of the Mesolithic, several aspects of different loci may be linked to diachronic influences. The excellent preservation of the archaeological level at Paris-Farman and the recording methods employed highlights the interest of the site for palethnographic studies similar to those from sites recently discovered on valley floors (see Ducrocq, 2001; Fagnart *et al.*, 2008; Lang and Sicard, 2008; Fagnart *et al.*, 2008; Séara *et al.*, 2002; Séara, 2008 and 2010). The discovery of the Paris-Farman site forms part of this renewal and largely contributes to reviving Mesolithic research dynamics in the Île-de-France region (Souffi *et al.*, in prep.) and at the larger scale of the Paris Basin.

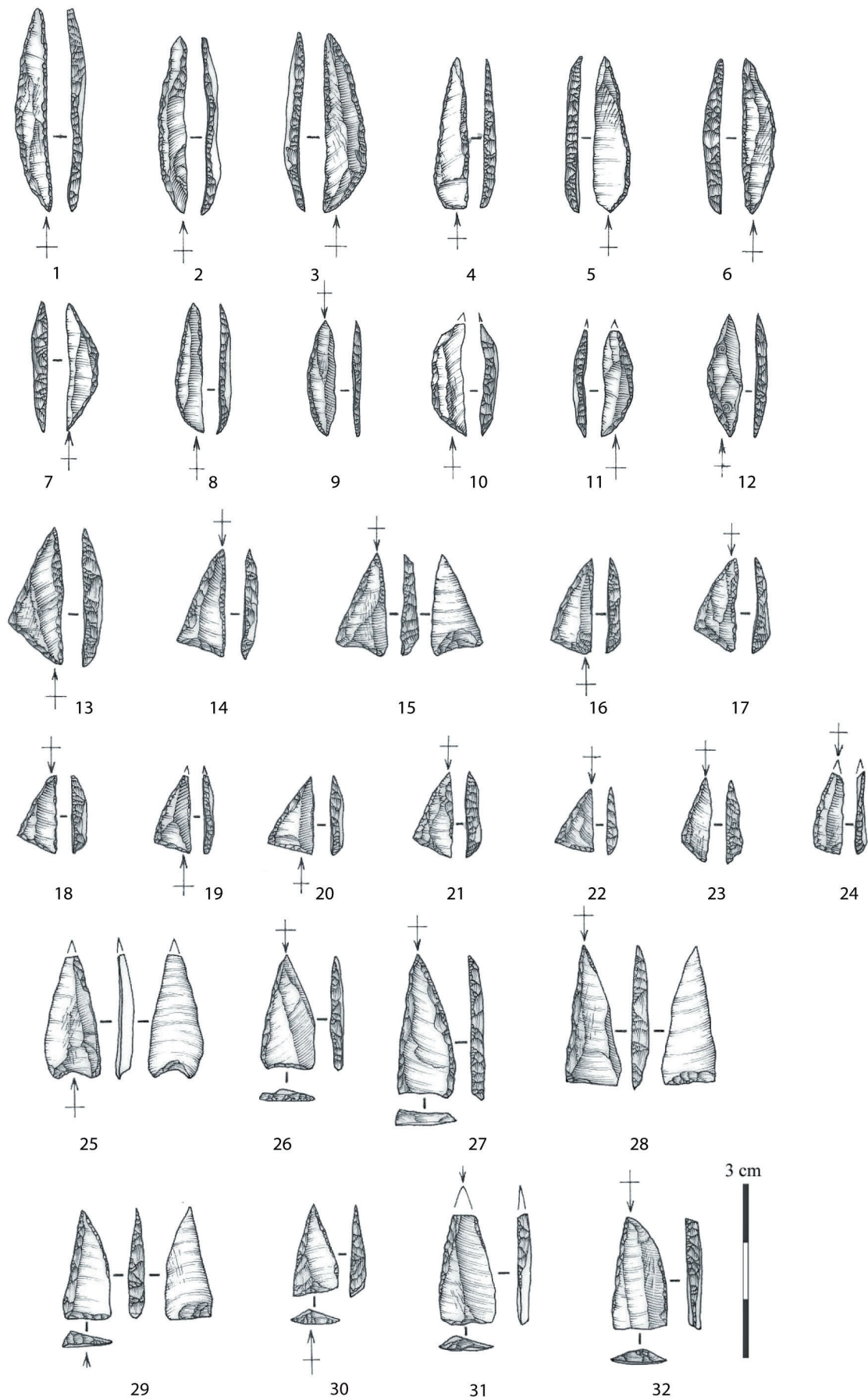


Fig. 13 – 62 rue Henry-Farman, Paris. Locus 5: microliths. 1–12: crescents; 13–24: scalene triangles; 25–32: points with retouched bases (drawings E. Boitard-Bidaut, INRAP).

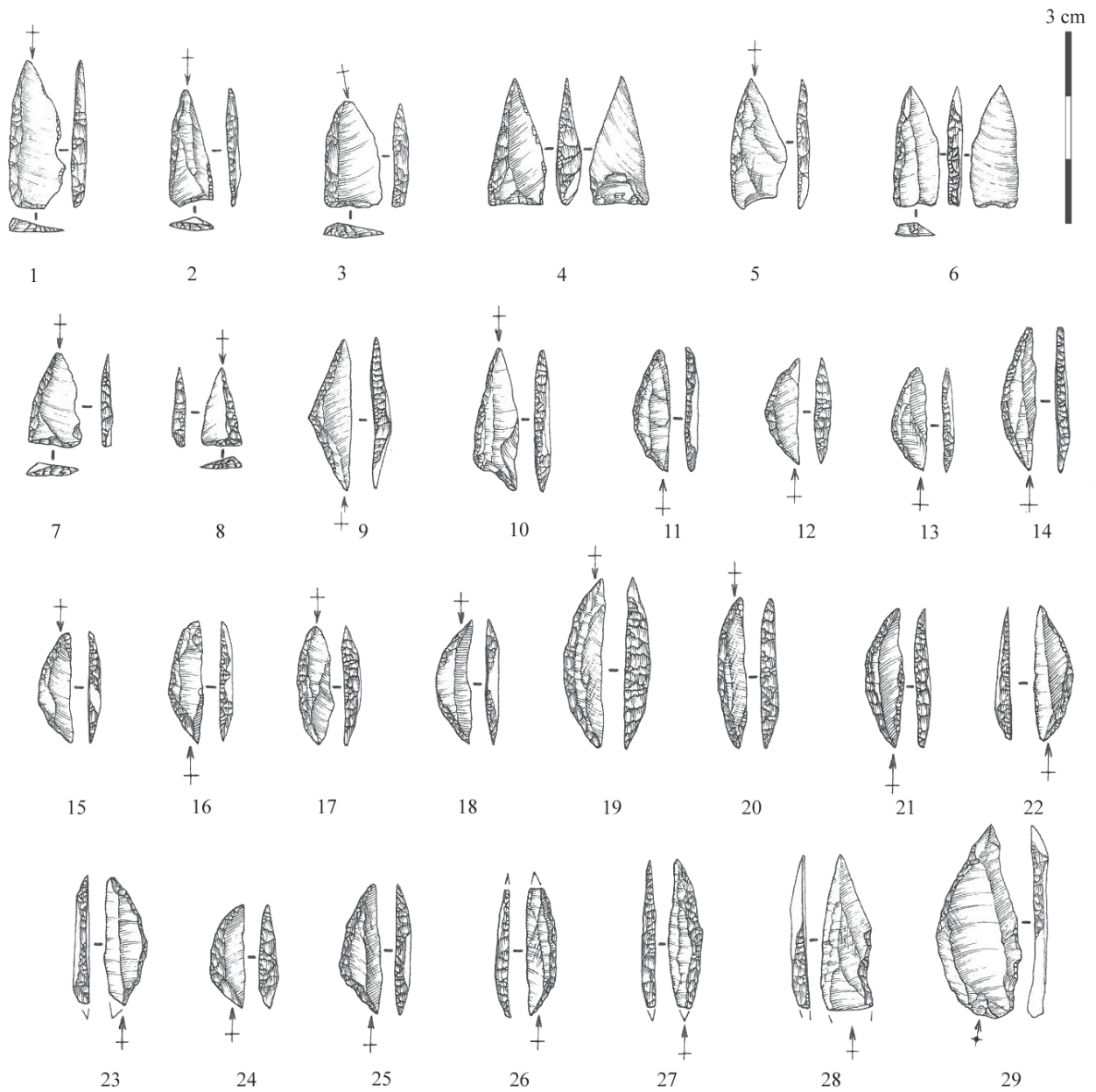


Fig. 14 – 62 rue Henry-Farman, Paris. Locus 2: microliths. 1–8: points with retouched bases; 9: isosceles triangle; 10: scalene triangle; 11–27: crescents; 28–29: microlith rough-outs (drawings E. Boitard-Bidaut, INRAP).

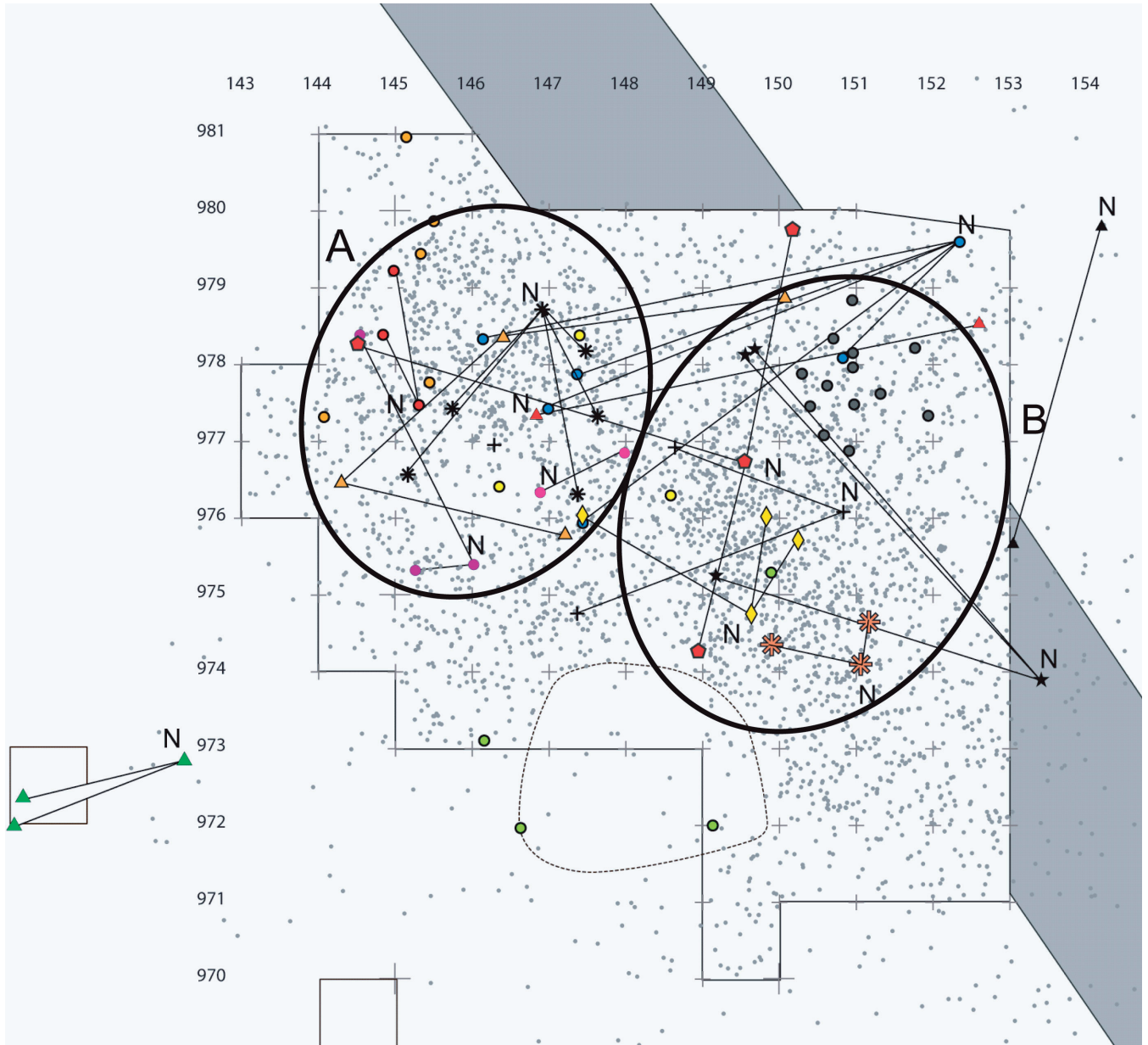


Fig. 15 – 62 rue Henry-Farman, Paris. Locus 2: distribution of refits (graphic design B. Souffi).

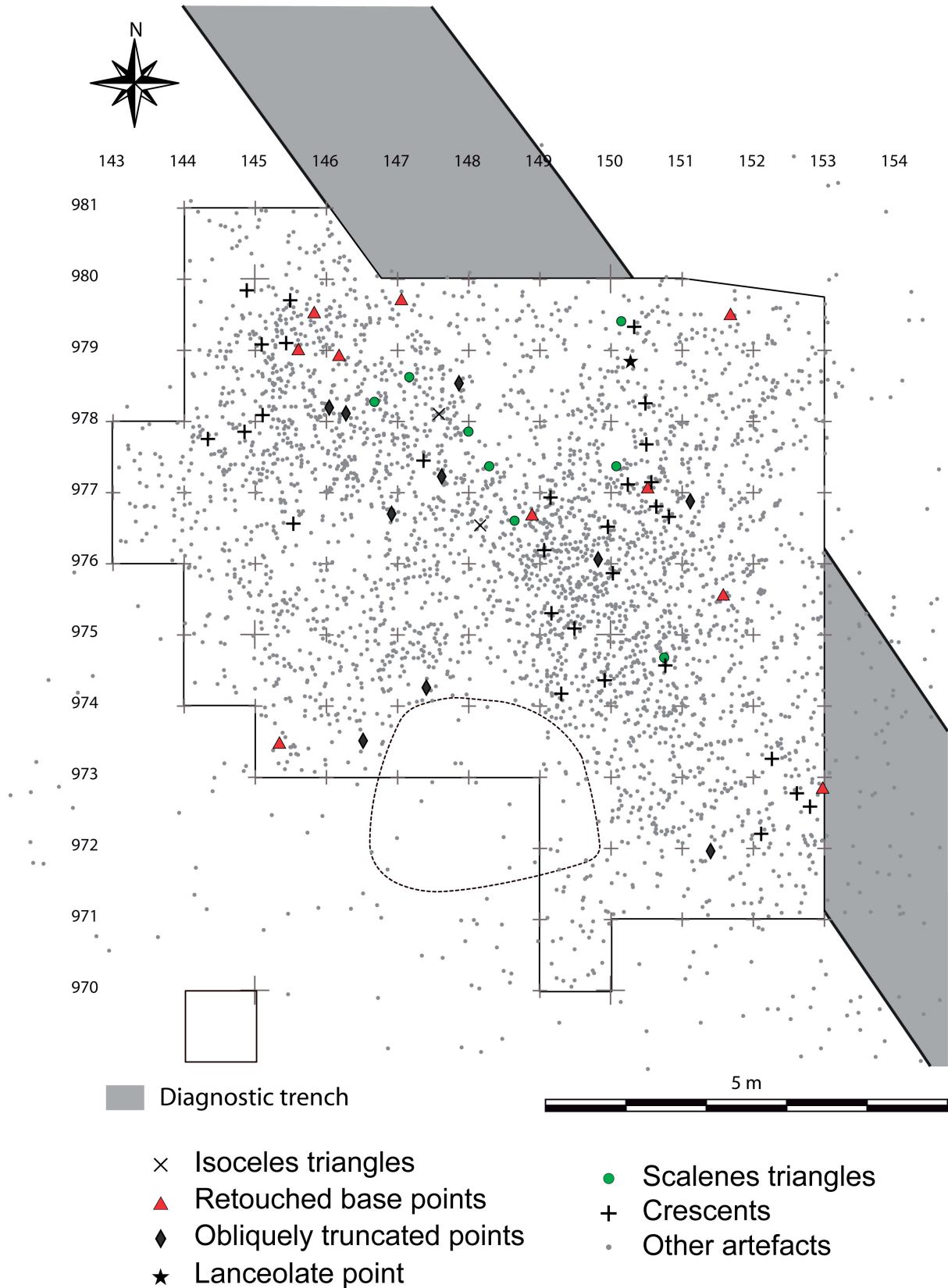


Fig. 16 – 62 rue Henry-Farman, Paris. Locus 2: distribution of microliths (graphic design B. Souffi).

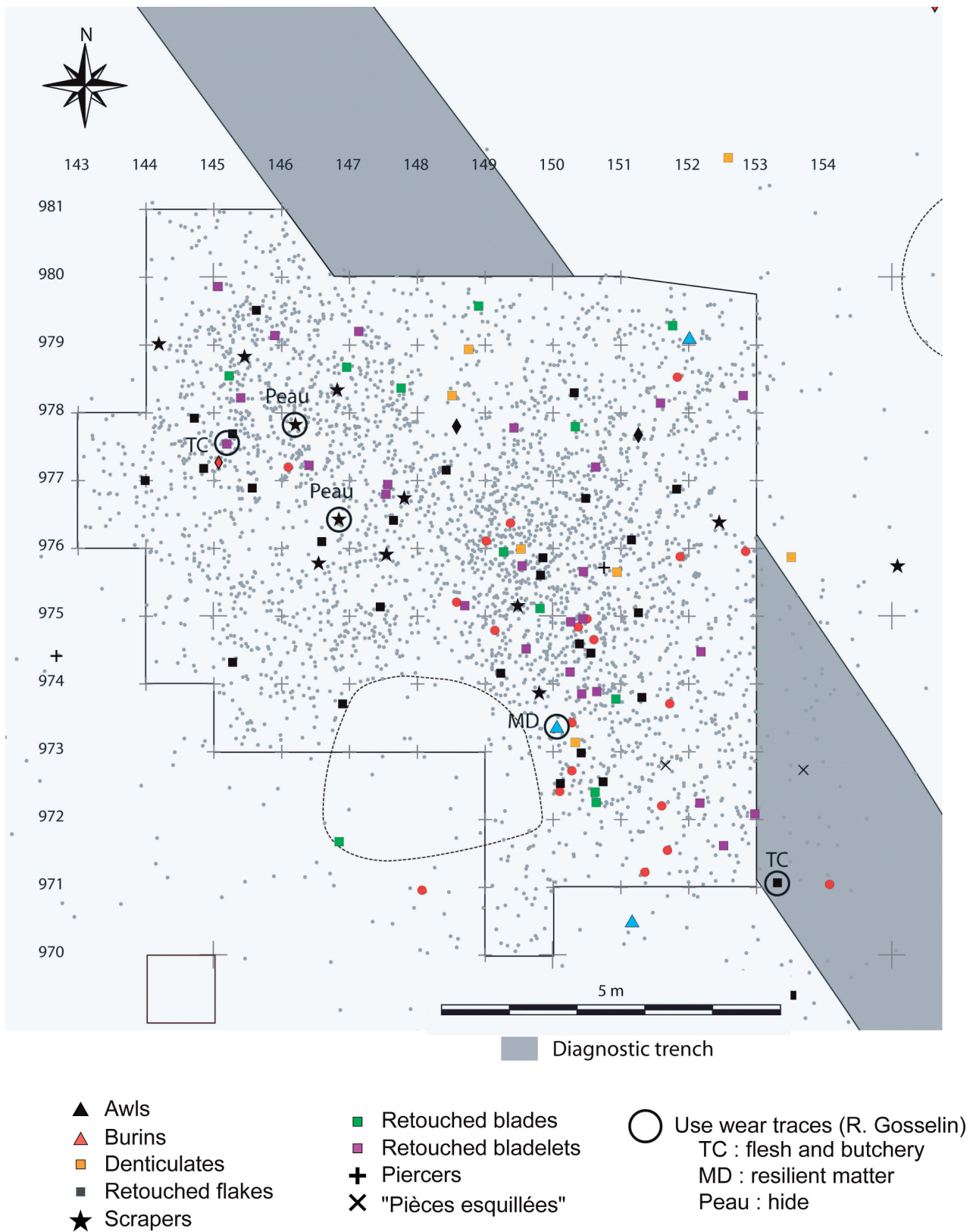


Fig. 17 – 62 rue Henry-Farman, Paris. Locus 2: distribution of domestic tools (graphic design B. Souffi).



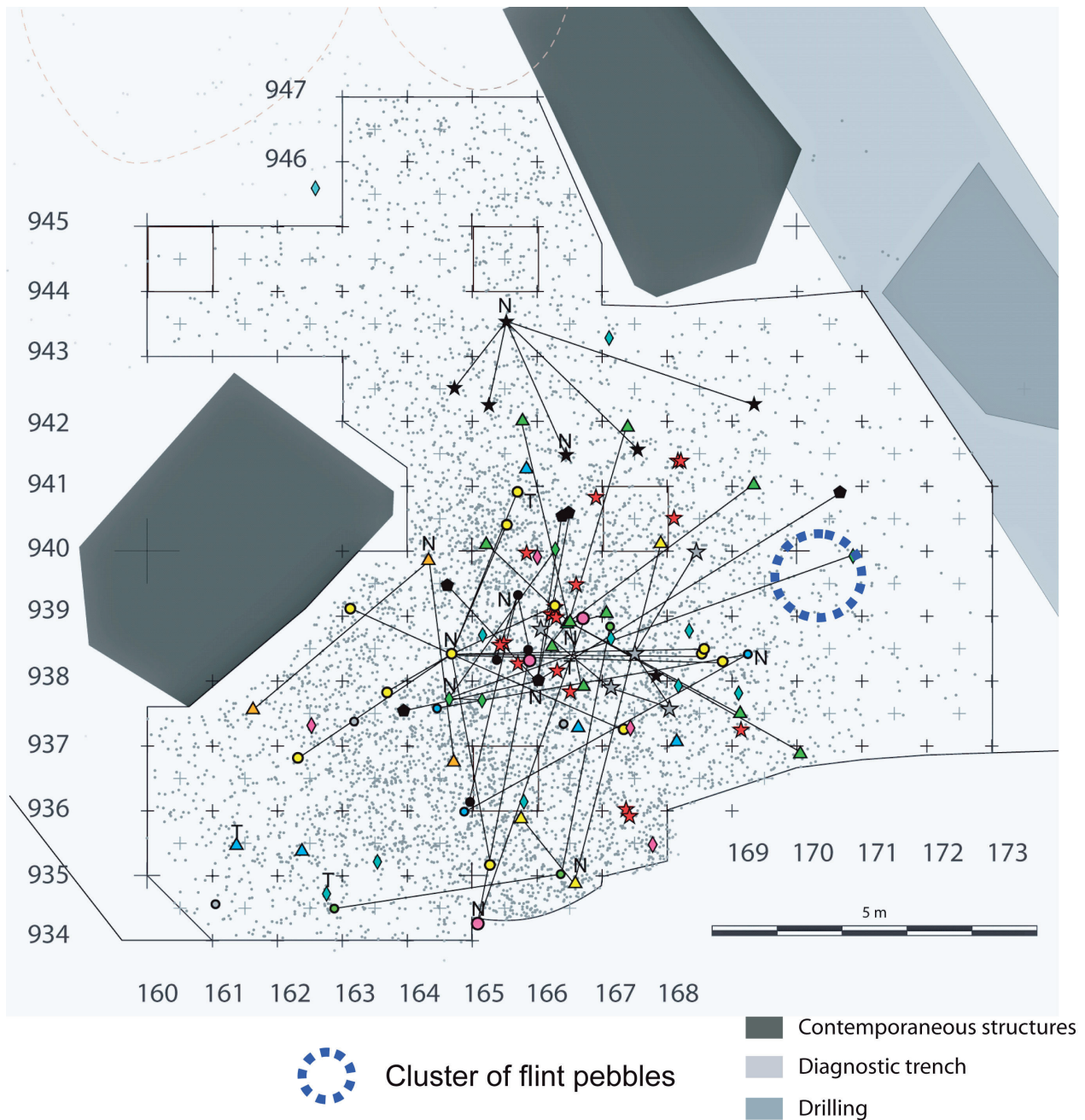


Fig. 18 – 62 rue Henry-Farman, Paris. Locus 5: distribution of refits (graphic design B. Souffi).

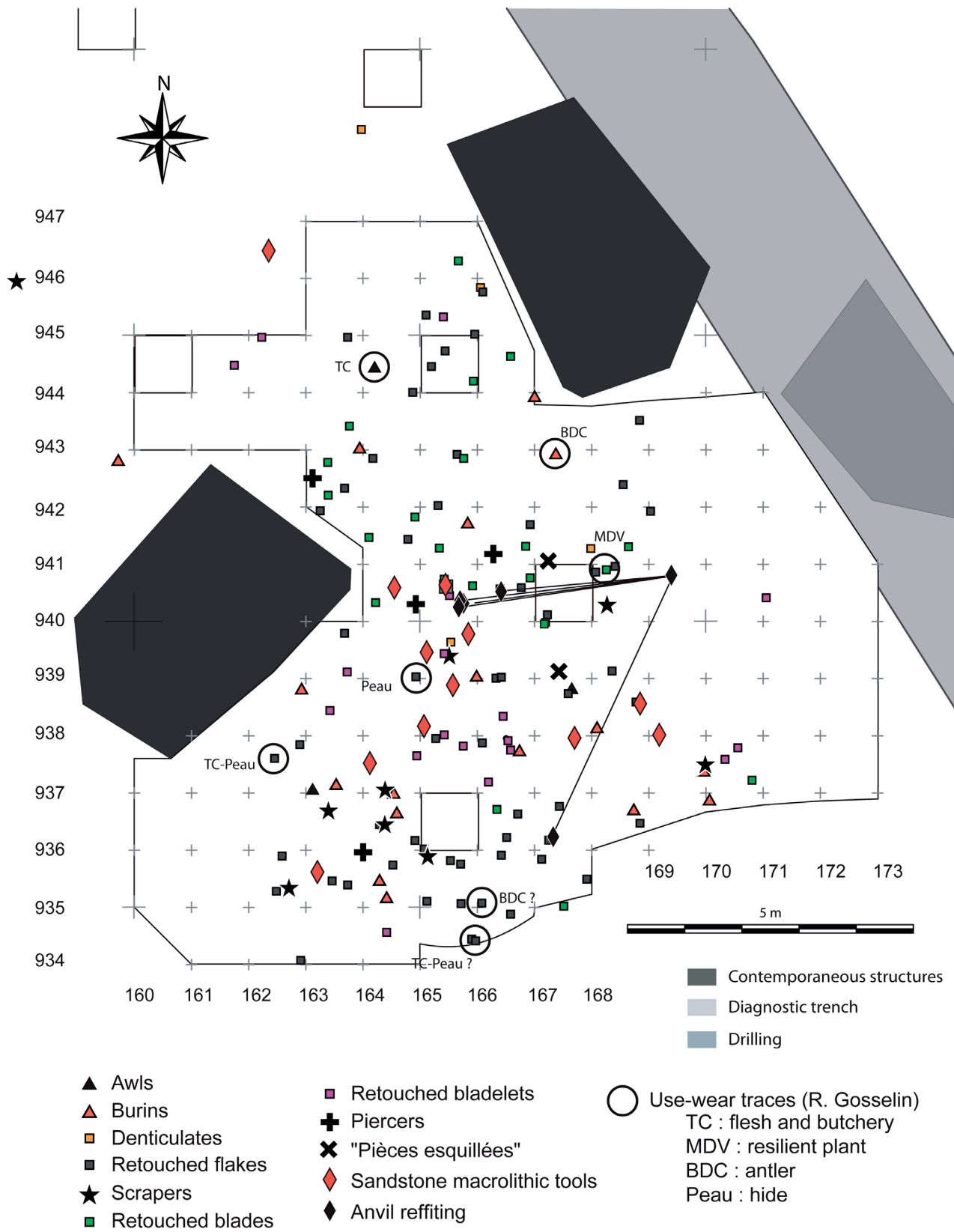


Fig. 19 – 62 rue Henry-Farman, Paris. Locus 5: distribution of domestic tools (graphic design B. Souffi)..

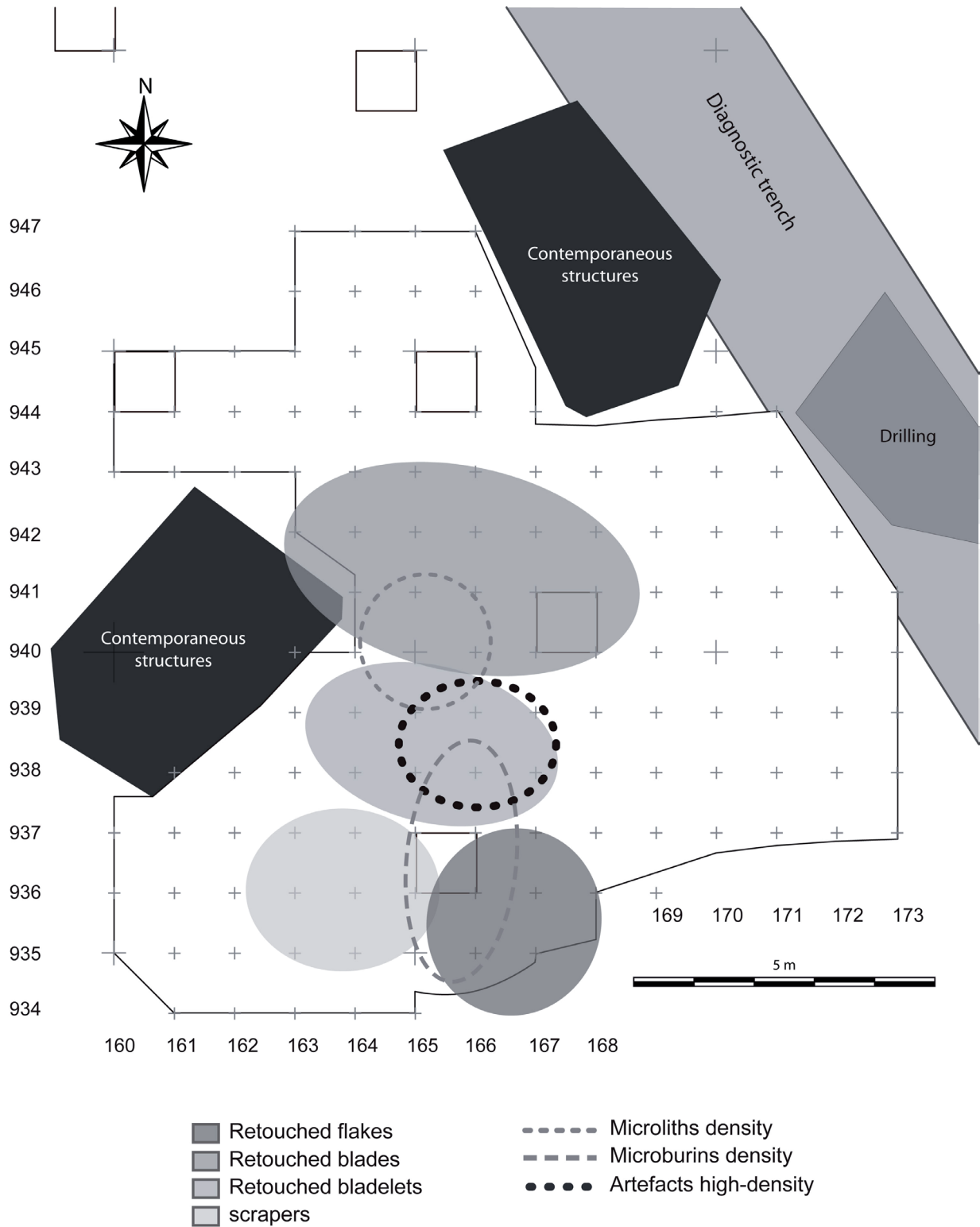


Fig. 20 – 62 rue Henry-Farman, Paris. Locus 5: overall spatial organisation (graphic design B. Souffi).

## REFERENCES

- AMBROSE S. H. (1990) – Preparation and Characterization of Bone and Tooth collagen for isotopic analysis, *Journal of Archaeological Science*, 17, p. 431–51.
- COUTARD S., DUCROCQ T., LIMONDIN-LOZOUET N., BRIDAULT A., LEROYER C., ALLENET G., PASTRE J.-F. (2010) – Contexte géomorphologique, chronostratigraphique et paléoenvironnemental des sites mésolithiques et paléolithiques de Warluis dans la vallée du Thérain (Oise, France), *Quaternaire*, 21, 4, p. 357–84.
- DAVID É. (2004) – Transformation des matières dures d'origine animale dans le Mésolithique de l'Europe du Nord, in D. Ramseyer (ed.), *Industrie de l'os préhistorique. Matières et techniques*, Paris, Société Préhistorique Française (Fiches de la Commission de nomenclature de l'industrie osseuse, 11), p. 113–49.
- DAVID É. (submitted) – *Technologie osseuse des derniers chasseurs préhistoriques en Europe du Nord (X<sup>e</sup>-VIII<sup>e</sup> millénaires avant J.-C.). Le Maglemosien et les technocomplexes du Mésolithique*, Montagnac, Monique Mergoïl (Préhistoires).
- DENIRO M.-J. (1985) – Postmortem Preservation and Alteration of In Vivo Bone Collagen Isotope Ratios in Relation to Palaeodietary Reconstruction, *Nature*, 317, p. 806–9.
- DUCCROCQ T. (2001) – *Le Mésolithique du bassin de la Somme*, Lille, université des sciences et techniques de Lille, Conseil général de la Somme (Publication du CERP, 7), 353 p.
- DUCCROCQ 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 the international conference (Brussels, 2007), Newcastle upon Tyne, Cambridge Scholars Publishing, p. 345–62.
- DUCCROCQ T., BRIDAULT A., COUTARD S. (2008) – Le gisement mésolithique de Warluis (Oise) : approche préliminaire, in J.-P. Fagnart, A. Thevenin, T. Ducrocq, B. Souffi et P. Coudret (eds.), *Les débuts du Mésolithique en Europe du Nord-Ouest*, proceedings of the conference (Amiens, 9-10 October 2004), Paris, Société préhistorique française (Mémoire 45), p. 85–106.
- FAGNART J.-P., COUDRET P., SOUFFI B. (2008) – Les occupations mésolithiques du gisement de Saleux (Somme), in J.-P. Fagnart, A. Thevenin, T. Ducrocq, B. Souffi and P. Coudret (eds.), *Le début du Mésolithique en Europe du Nord-Ouest*, proceedings of the conference (Amiens, 9-10 October 2004), Paris, Société préhistorique française (Mémoire 45), p. 107–33.
- GOB A. (1984) – Les industries microlithiques dans la partie sud de la Belgique, in D. Cahen and P. Haesserts, *Peuples chasseurs de la Belgique préhistorique dans leur cadre naturel*, Brussels, Institut royal des sciences nationales de Belgique, p. 195–211.
- GOSSELIN R. (2005) – La transition Magdalénien/Azilien observée à travers la fonction des grattoirs du Bois-Ragot, in A. Chollet and V. Dujardin (eds.), *La grotte du Bois-Ragot à Gouex, Vienne. Magdalénien et Azilien*, *Essais sur les hommes et leur environnement*, Paris, Société préhistorique française (Mémoire 38), p. 192–219.
- GRISELIN S. (2010) – Le Montmorencien, in E. Guesquière and G. Marchand (eds.), *Le Mésolithique en France. Archéologie des derniers chasseurs-cueilleurs*, Paris, La Découverte (Archéologies de la France), p. 54.
- LANG L., ed. (1997) – *Occupations mésolithiques dans la moyenne vallée de la Seine : Rueil-Malmaison « Les Closeaux », 90 063 007 AP (Hauts-de-Seine)*, final excavation report, Paris, AFAN coordination A86, SRA Île-de-France, 2 vols., 396 p.
- LANG L., SICARD S. (2008) – Les occupations mésolithiques des Closeaux à Rueil-Malmaison (Hauts-de-Seine), in J.-P. Fagnart, A. Thévenin, T. Ducrocq, B. Souffi and P. Coudret (eds.), *Les débuts du Mésolithique en Europe du Nord-Ouest*, proceedings of the conference (Amiens, 9-10 October 2004), Paris, Société préhistorique française (Mémoire 45), p. 63–83.
- PHILIBERT S. (1993) – Quelle interprétation fonctionnelle pour les grattoirs ocrés de la Balma Margineda (Andorre), in C. Anderson, S. Beyries, M. Otte, and H. Plisson, *Traces et fonction : les gestes retrouvés*, proceedings of the international conference (Liège, 8-10 December 1990), Liège, université de Liège (ERAUL, 50), p. 131–37.
- PHILIBERT S. (2002) – *Les derniers « Sauvages ». Territoires économiques et systèmes techno-fonctionnels mésolithiques*, Oxford, Archaeopress (British Archaeological Reports, International Series 1069), 193 p.
- ROZOY J.-G. (1968) – L'étude du matériel brut et des microlithes dans l'Épipaléolithique (Mésolithique) francobelge, *Bulletin de la Société préhistorique française*, 65, p. 365–90.
- SÉARA F. (2000) – Les cadres chronologiques et culturels des occupations mésolithiques de Ruffey-sur-Seille « À Daupharde » et de Choisey « Aux Champins » (Jura), in A. Thévenin (ed.), *Les derniers chasseurs-cueilleurs d'Europe occidentale (13000-5500 avant J.-C.)*, proceedings of the international conference (Besançon, Doubs, France, 23-25 October 1998), Besançon, Presses universitaires franc-comtoises, p. 125–32.
- SÉARA F. (2008) – Les occupations du Mésolithique ancien et moyen du site des Basses Veuves à Pont-sur-Yonne (Yonne) : premiers résultats, in J.-P. Fagnart, A. Thevenin, T. Ducrocq, B. Souffi and P. Coudret (eds.), *Les débuts du Mésolithique en Europe du Nord-Ouest*, proceedings of the conference (Amiens, 9-10 October 2004), Paris, Société préhistorique française (Mémoire 45), p. 169–82.
- SÉARA F. (2010) – *Dammartin-Marpain (Jura), Prairie du Milieu. Nouvelles données sur le peuplement mésolithique, néolithique, protohistorique et antique de la basse vallée de l'Ognon*, final excavation report, INRAP Grand-Est sud, 2 vols., 725 p.
- SÉARA F., ROTILLON S., CUPILLARD C. (2002) – *Campements mésolithiques en Bresse jurassienne. Choisey et Ruffey-sur-Seille (Jura)*, Paris, Maison des sciences de l'homme

(Documents d'archéologie française, série Archéologie préventive, 92), 338 p.

SOUFFI B., ed. (in prep.) – *Neuville-sur-Oise « Chemin fin d'Oise » - Station d'épuration. 9000 ans d'occupation sur les bords de l'Oise, du Mésolithique au Moyen Âge*, final excavation report, INRAP Centre – Île-de-France, service régional de l'Archéologie d'Île-de-France.

SOUFFI B., MARTI F. (2011) – *Paris 15<sup>e</sup> arrondissement, 62 rue Henry-Farman. Évolution culturelle et environnementale d'un site stratifié en bord de Seine, du Mésolithique au premier âge du Fer*, final excavation report, INRAP Centre – Île-de-France, service régional de l'Archéologie d'Île-de-France, 4 vols., 1 337 p.

SOUFFI B., CHAUSSÉ C., GRISELIN S., OLLIVIER C., RONCIN O. (in prep.) – Les occupations mésolithiques de plein air en Île-de-France : bilan préliminaire à partir des découvertes récentes en contexte préventif, *Revue archéologique d'Île-de-France*, 4.

WALCZAK J. (1998) – *Les occupations mésolithiques de la plaine du Closeau et des Coteaux de la Jonchère*, final excavation report, AFAN coordination A86, service régional de l'archéologie d'Île-de-France.

WATRIN L. (1996) – *Héliport de Paris, XV<sup>e</sup> arrondissement, commune d'Issy-les-Moulineaux (92) : les vestiges pré- et protohistoriques sur la plaine inondable*, final excavation report, campagne 11/03/1996-11/05/1996, INRAP Centre – Île-de-France, service régional de l'archéologie d'Île-de-France, 53 p.

#### **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

#### **Fabrice MARTI**

INRAP Centre – Île-de-France  
32, rue Delizy  
93500 Pantin, France

#### **Christine CHAUSSÉ**

UMR 8591, INRAP Centre – Île-de-France,  
34-36, avenue Paul Vaillant-Couturier  
93120 La Courneuve, France

#### **Sylvain GRISELIN**

UMR 7041 « Ethnologie préhistorique »  
INRAP Centre – Île-de-France  
34-36, avenue Paul Vaillant-Couturier  
93120 La Courneuve, France

#### **Anne BRIDAULT**

UMR 7041 « Archéologies environnementales »  
Maison René Ginouvès  
21, allée de l'Université  
92023 Nanterre cedex, France

#### **Éva DAVID**

UMR 7055, Maison René Ginouvès  
21, allée de l'Université  
92023 Nanterre cedex, France

#### **Dorothee G. DRUCKER**

Institut für Geowissenschaften, Biogeologie,  
Universität Tübingen, Hölderlinstr. 12  
72074 Tübingen, Germany

#### **Renaud GOSSELIN**

INRAP Centre – Île-de-France  
32, rue Delizy  
93500 Pantin, France

#### **Salomé GRANAI**

Doctoral Paris 1 University, UMR 8591  
1, place Aristide-Briand  
92195 Meudon cedex, France

#### **Caroline HAMON**

UMR 8215 « Trajectoires »  
Maison René Ginouvès  
21, allée de l'Université  
92023 Nanterre cedex, France

#### **Charlotte LEDUC**

Postdoctoral, UMR 7041  
« Archéologies environnementales »  
Maison René Ginouvès  
21, allée de l'Université  
92023 Nanterre cedex, France

#### **Marian VANHAEREN**

UMR 5199, université Bordeaux 1  
Bâtiment B8, avenue des Facultés  
33405 Talence cedex, France

#### **Frédérique VALENTIN**

UMR 7041 « Ethnologie préhistorique »  
Maison René Ginouvès  
21, allée de l'Université  
92023 Nanterre cedex, France

# 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.

MESOLITHIC PALETHNOGRAPHY



Institut national  
de recherches  
archéologiques  
préventives



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

ISBN: 2-913745-51-2



9 782913 745513

SÉANCES SPF