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Andrzej Kempisty at Nemrik

The place was North Iraq, Upper Mesopotamia – the heartland of ancient Assyria.

Karol Szymczak and I went there in the fall of 1986, dreaming of a prehistoric site to excavate, God permitting, an early Neolithic site, but a Paleolithic one would do as well.

The early Neolithic in the Near East is the cream of the crop, because it was there that the Lord decided to civilize HUMANITY by putting it on the road towards the NEW. God's miracle took place almost 9000 years ago. Archaeologists investigating this phenomenon in the Near or Middle East can feel ennobled, because so little is still known about the phenomenon. Indeed, the gaps in our knowledge are enormous and Mesopotamia is one such GAP.

We have some knowledge of the Neolithic in the mountains and foothills of the Zagros, we know a great deal about the early Neolithic in the Levant, but back in the 1980s the map between these regions was completely blank: a hole, nothing and ignorance, despite Robert Braidwood having a go at M'lefaat in the eastern Jezirah before leaving Iraq (yet another revolution).

Dreams are one thing, but we did not have any early Neolithic site in our sight. We knew the Paleolithic from Iraq and we found its traces with Waldemar Chmielewski in the region of Masnaa on the Euphrates. Next was Eski Mosul, 'old Mosul' in Turkish, a large Iraqi town in the north of the country. A government program had been initiated to build a huge dam on the river there, triggering extensive salvage explorations. We joined the program and went to Eski to look around on the high river terraces along the Tigris, near the village of Faidah. We found the Paleolithic as expected, mainly Acheulian and Mousterian, mostly surface finds and eroded sites. Our Iraqi hosts listened with wonder when told about the oldest artefacts that were even 300,000 or 400,000 years old. For them it was entirely unimaginable. Polish cartographers had surveyed the whole country, but still we had no topographical maps to use. Maps were top secret and not for us. This hardly stopped our endeavour, we used whatever we could get our hands on — a hand-drawn copy of a wall map from the Faidah district (Faidah means excellent Arabic brewed coffee), an old sketch from a friend. These documents were hardly credible, but certainly we were not completely blind in the region.

We took a car and, following the indications in these doubtful 'maps', we set out together with antiquities inspector Mohammed Zaki to explore the WOLRD OF THE PALEOLITHIC. We had results, the maps appeared to be correct, we spent our time drawing flint tools that we had found and got excited about the material and its publishing potential.

Then one day, the devil (or angel) led us astray. We made a mistake reading our sketch map and set off to the north-west, intending to turn left into a side road. We took that turn, but it turned out not to be where we wanted to go. It must have been an ANGEL, because we drove straight into an early Neolithic aceramic site. We found NEMRIK.

We had some scrambled eggs for breakfast first, which Mohamed made a local woman prepare for us, and then we headed out. Just outside the village, we found a clay floor without vegetation, and on this floor, micro-flints and some sherds. A quick investigation revealed stratified levels, stone-cobbled pavements, flints, and bones, but no ceramic sherds. The flint tools could have matched PPN, but there are no published parallels; the pottery turned out to be of Bronze Age date – according to Morgait and Munchayev who came to visit and had just arrived in Mosul. "Ja wsedga miechtal o takoi stoyankie" [I have always dreamed of a site like this one], exclaimed Nikolai Bader. So we knew we hit the jackpot – we found PPN!

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Back in Warsaw, we set about organising funds for research from the Polish Centre of Mediterranean Archaeology at the University of Warsaw. Getting through the red tape took time, but in the end we succeeded. We would go on to work at Nemrik and later at M'lefaat for several years.

The following year we worked in the spring and then again in the fall. Our Jubilarian, Andrzej Kempisty, was part of the team (Fig. 1). He would study the architecture we were expecting to find. Karol Szymczak and I looked at the flint industry, Ryszard F. Mazurowski – at the stone industry (he later made it his habilitation work). Rafał Koliński and Włodzimierz Bogusz helped out with the archaeology. Andrzej Reiche took care of

Fig. 1. The Nemrik team: A. Kempisty, second from the right (after S. K. Kozłowski, *Nemrik. An aceramic village in northern Iraq*, Warsaw 2002, fig. 1, photo by A. Reiche).

Fig. 2. A. Kempisty in his Nemrik house no. 4, photo by A. Reiche.

the Assyrian tell at the southern end of the site and was responsible for photography, while I worked with stratigraphy and took it upon myself to manage the general logistics. Wojciech Borkowski would join us later, along with Kazimierz Kuźma.

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In the spring of 1987, we flew to Baghdad. We then took a taxi to Mosul and set up headquarters in Niniveh. Our inspector was Kerim Joma Yusuf, a friendly soul, and we were off and running.

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The site grid was established, each divided into quarters, and each trench was dug to culturally sterile levels by the stratigraphic method with the experienced hands of Shirkatis/technicians and workers brought to the site. Andrzej set the documentation standards: a 1:20 scale for the general plans, 1:10 for the houses, and 1:5 for the features and other details. Each excavator had their own group of workers. We did the drawings (plans and sections), Reiche took photos, all the architecture was studied under the close supervision of Master Kempisty who

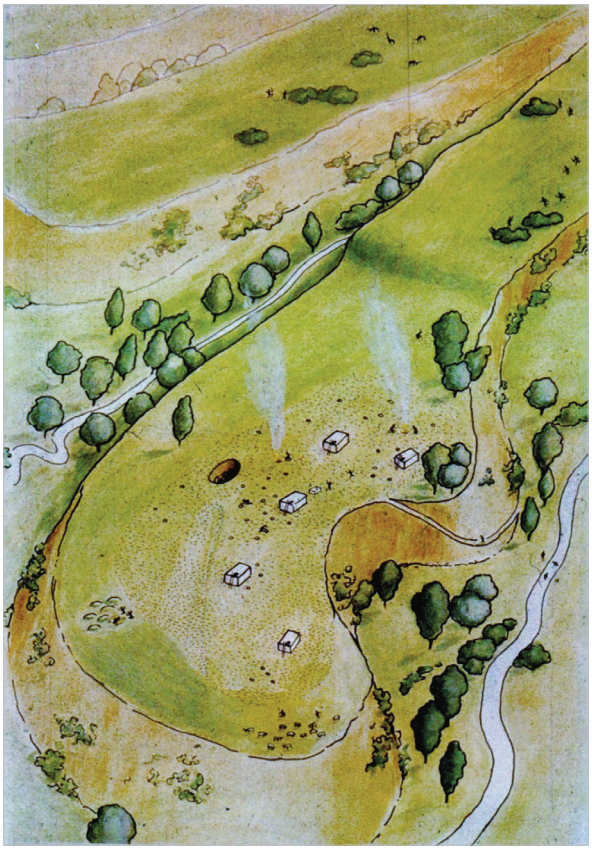

Fig. 3. Nemrik, the Neolithic site in its latest phase, drawing by A. Nowacki.

consulted, prompted, suggested, criticised, or praised (Fig. 2). He made sure that the house interiors were excavated with proper care, with attention being paid to the poorly-preserved plaster and the clay floor features, as well as the small finds from their surface. Thanks to him we recognised wall plaster, traced foundation trenches, identified clay platforms and pillars, mapped post-sockets and stone installations mounted in the floors, and recorded small finds and heavy stone tools on these floors. We discovered stone trays leaning against the walls and statuettes of the gods of Nemrik alongside the burned skeleton of an inhabitant who lost his life trying to save one of the statuettes. Flint concentrations and professionally traced brick bondwork like the ones we found are seldom documented in the Near Eastern Neolithic. We explored and documented them thoroughly under the watchful eye of Master Andrzej who kept on smiling gently while checking stubbornly, advising, questioning, discussing, observing, and in effect standardising, improving, and enriching our understanding and documentation of the Neolithic architecture of Nemrik. He would be the one responsible for publishing it! (Fig. 3).

We spent time over details without losing sight of the bigger picture, took notes, documented the superposition of the houses, reaching an impressive number of more than twenty investigated features. These included round or oval, evolving into sub-rectangular. Habitations were naturally larger and more numerous, while the smaller ones served as stores and coffins.

Andrzej described them scrupulously and Małgorzata Dołęgowska continued this study in her diploma work at the University of Warsaw, supervised by the author. Her and Andrzej's work has just gone to the printers.

Operation Nemrik has thus ended in this fashion, 30 years later, to the glory of Polish archaeology, the glory of particular scholars and our Jubilarian – Andrzej Kempisty.

Glory to the victors!

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Cremation Burials of Stone Age Hunter-Gatherers on the European Plain

Abstract

Cremation burials of Stone Age hunter-gatherers were found at 21 sites across the European Plain (including southern Scandinavia). In total, there are 54 graves and deposits containing bones of at least 89 individuals. Sites with Mesolithic cremations are unevenly spread over the European Plain and there are some regions where this type of burial was more common, such as the Seine Valley and the Low Countries, southern Scandinavia or north-eastern Poland. In all of these regions, the oldest burials are dated to the Early Mesolithic, which indicates a parallel and independent origin of this custom. Moreover, each region or even cemetery has its own features of the cremation rite. In both the Western European Plain and southern Scandinavia, most burials are dated to the Middle Mesolithic and there are only a few examples linked to the Late Mesolithic. North-eastern Poland, including the Dudka cemetery, is probably the only region where cremation was practised on a wider scale in the Late Mesolithic and para-Neolithic. The share of cremations among all burial types differs between regions and cemeteries. It was probably a dominant practice in the Middle Mesolithic in the Netherlands. In other cases, cremation probably involved a large part of the local hunter-gatherer society, for instance at the Dudka cemetery in Masuria or in the Middle Mesolithic of Vedbæk Fiord (Zealand), whereas at the cemeteries in Skateholm it amounted to only a few percent, suggesting that it was practised in the case of the deceased of particular status or in unusual circumstances only.

Keywords: Mesolithic, para-Neolithic, cremation, burial rite, European Plain

Introduction

Cremation has long been perceived as an unusual burial custom for the Stone Age, especially for the hunter-gatherer societies. The Mesolithic dating of such discoveries has sometimes been disputed.[1] In other cases, burned human bones from Mesolithic settlements used to be interpreted as a result of cannibalism rather than burial rite, even if bones were found in a formal grave and bore no cut marks.[2] Untypical burial types, other than primary inhumation, or unusual contexts in which bones were found (in settlement structures) were in most cases taken as 'evidence' for cannibalism.[3] Over time, however, more undeniable Mesolithic cremation burials appeared, altering the general view on the nature of burned bones at Stone Age hunter-gatherer sites. Recent studies and new discoveries have shown that burial practices at the time were more complex than previously believed and cremation was one of the many possibilities of dealing with the dead used since the Early Mesolithic.[4]

Cremation burials of Stone Age hunter-gatherers were found at 21 sites across the European Plain, including southern Scandinavia (Fig. 1). Additionally, at least several other sites yielded loose burned human bones. Their distribution is uneven and there are regions where cremation seems to have been more frequent. One of these is the Western European Plain, from north-eastern France (Seine Valley) to the Netherlands, where 11 graves with burned human remains were uncovered at eight sites (Fig. 1). The next region is southern Scandinavia, with eight sites and 14 graves. Only single cases of cremation come from Germany (Coswig) and western Poland (Pomorsko), whereas in north-eastern Poland such practices were more frequent (Fig. 1).

[1] Larsson 1982; Verlinde 1974.
[2] Kobusiewicz, Kabaciński 1991; Piasecki, Kapla 2003; Verlinde 1974; Wiercińska, Szlachetko 1977.
[3] Kobusiewicz, Kabaciński 1991; Verlinde 1974.
[4] Bugajska 2014; Bugajska, Gumiński 2016; Eriksen, Andersen 2016; Küßner, Schunke 2016; Niekus *et al.* 2016.

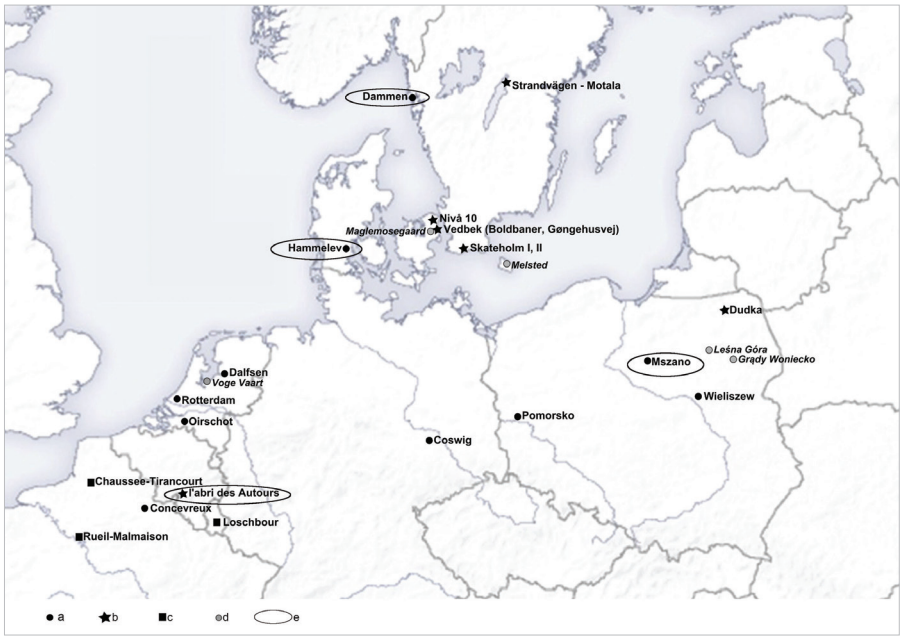

Fig. 1. Sites with Mesolithic and para-Neolithic cremation burials: a – cremation burials only; b – contemporary cremation and inhumation burials; c – noncontemporary cremation and inhumation burials; d – sites with loose burned human bones mentioned in the text; e – Early Mesolithic cremation burials (compiled by K. Bugajska).

Taking into account the uneven distribution of cremation burials, each region will be discussed separately in order to study the local character of the ritual. According to the original publications, the graves are linked to the Early, Middle or Late Mesolithic, based mostly on radiocarbon dates or, alternatively, on grave goods. It should be noted, however, that there are differences in the chronological periodisation of the Mesolithic in particular regions. In the Western European Plain (Low Countries, north-eastern France), the Early Mesolithic corresponds to the Pre-Boreal period (10 000–9000 BP conv.), the Middle Mesolithic – to the Boreal period and the beginning of the early Atlantic period (9000–7500 BP), while the Late Mesolithic starts in the Early Atlantic period (75000 BP).[5] In southern Scandinavia, the Early Mesolithic (Maglemose culture) corresponds to the Pre-Boreal and Boreal periods (10 000–8000 BP), the Middle Mesolithic (Kongemose culture) to the first half of the Atlantic period (8000–6500 BP), and the Late Mesolithic (Ertebølle culture) to the second half of the Atlantic period (6500–5200 BP).[6] Some cremations or loose burned human bones are linked to the para-Neolithic, i.e. to pottery-producing hunter-gatherer societies, which appeared in the discussed regions between 6000 and 5600 BP conv.[7]

The para-Neolithic societies in particular regions were descendants of former Mesolithic societies with regard to the economy, settlement system, burial rites and manufacturing. It should be added that such hunter-gatherer societies are named differently in particular regions. For example, the Swifterbant culture is classified as Neolithic in the Low Countries, whereas the whole period of the Ertebølle culture is linked to the Late Mesolithic in Scandinavia.

Seine Valley (north-eastern France) and the Low Countries – the Western European Plain

Chronology of cremation burials and their relation to inhumations

The oldest cremation dated to the Early Mesolithic, 9090 ± 140 BP, comes from a rock shelter – Abri des Autours in Belgium (Table 1). In turn, the youngest burial comes from Concevreux in France and is directly dated to 6440 ± 30 BP, i.e. to the Late Mesolithic (Table 1). All other graves are considered Middle Mesolithic based on the grave goods or radiocarbon dates which range from 8465 ± 45 to 7760 ± 130 BP (Table 1). This indicates that on the Western European Plain, cremation was more commonly practised in the Middle Mesolithic.

In most cases, cremation is the only burial type found at a given site (Table 2). An exceptional case comes from an Early Mesolithic collective grave in a rock shelter, Abri des Autours in Belgium, where burned bones were deposited in one pit with inhumation burials (Table 2).

[5] Louwe Kooijmans 2007; Meiklejohn *et al.* 2010; 2015.
[6] Larsson 2017; Sørensen 2017.
[7] Larsson 2017; Louwe Kooijmans 2007.

Table 1. Radiocarbon dates of cremation burials from the European Plain.
Calibrated BC dates (95% confidence intervals) are based on: OxCal 4.3:2, IntCal 13 curve (Bronk Ramsey 2009).

Site	Country	No. of grave/pit	BP	Lab. No.	cal. BC (2σ)	Material	References
Abri des Autours	Belgium	burial AA2	***9090*** ± 140	OxA-5838	8700-7830	unburned bone	Polet, Cauwe 2002
Rotterdam	Netherlands	pit 60	***8465*** ± 45	GrA-43444	7587-7480	cremated bone	Niekus *et al.* 2016
La Chaussée-Tirancourt	France	pit 1	***8460*** ± 70	Gif-9329	7597-7356	hazelnut	Meiklejohn *et al.* 2010
La Chaussée-Tirancourt	France	pit 1	***8360*** ± 90	Gif-95471	7580-7179	animal bone	Meiklejohn *et al.* 2010
Rotterdam	Netherlands	pit 58	***8435*** ± 40	GrA-43393	7581-7381	cremated bone	Niekus *et al.* 2016
Oirschot V, 21	Netherlands	grave	***8320*** ± 40	GrA-13390	7515-7196	cremated bone	Meiklejohn *et al.* 2015
Rotterdam	Netherlands	pit 59	***8135*** ± 45	GrA-43443	7303-7047	cremated bone	Niekus *et al.* 2016
Loschbour	Luxemburg	pit?	***7960*** ± 40	Beta-132067	7041-6700	burned bone	Toussaint *et al.* 2009
Rotterdam	Netherlands	pit 59	***7850*** ± 35	GrN-33089	6806-6600	charcoal	Niekus *et al.* 2016
Rotterdam	Netherlands	pit 70	***7830*** ± 40	GrA-33087	6812-6574	charcoal	Niekus *et al.* 2016
Dalfsen	Netherlands	pit 4	***7760*** ± 130	GrN-7283B	7036-6416	charcoal	Meiklejohn *et al.* 2015
Rotterdam	Netherlands	pit 70	***6770*** ± 40	GrA-49738	5726-5626	cremated bone	Niekus *et al.* 2016
Concevreux	France	pit 3	***6440*** ± 30	GrA-37623	5479-5345	human bone	Bosset, Valentin 2013
Hammelev	Denmark	-	***8980*** ± 80	AAR-8195	8317-7837	cremated bone	Eriksen, Andersen 2016
Hammelev	Denmark	-	***8800*** ± 46	AAR-8196	8199-7685	cremated bone	Eriksen, Andersen 2016
Hammelev	Denmark	-	***8870*** ± 37	AAR-8783	8223-7838	cremated bone	Eriksen, Andersen 2016
Hammelev	Denmark	-	***8760*** ± 60	AAR-8197	8175-7601	cremated bone	Eriksen, Andersen 2016
Dammen	Sweden	-	***8340*** ± 40	GrA-14295	7521-7312	cremated bone?	Sjögren, Ahlström 2016
Nivå 10	Denmark	A128	***7035*** ± 35	AAR-14936	5995-5845	cremated bone	Jensen 2016
Motala-Strandvägen	Sweden	grave 7	***6739*** ± 62	Ua-44394	5737-5542	bone	Gummesson, Molin 2016
Motala-Strandvägen	Sweden	grave 1	***6677*** ± 40	Ua-30872	5664-5527	hazelnut	Gummesson, Molin 2016
Vedbæk Gøngehusvej	Denmark	grave N	***6530*** ± 60	K-6857	5616-5371	charcoal	Brinch Petersen, Meiklejohn 2003
Skateholm I	Sweden	grave 11	***6290*** ± 90	Lu-1835	5471-5046	charcoal	Larsson 1989
Nivå 10	Denmark	grave A144	***6154*** ± 45	AAR-12711	5221-4964	cremated bone	Jensen 2016
Coswig	Germany	-	***7900*** ± 50	GrA-22365	7029-6644	cremated bone	Küßner, Schunke 2016
Coswig	Germany	-	***7920*** ± 45	OxA-13472	7030-6657	cremated bone	Küßner, Schunke 2016
Mszano	Poland	grave 1	***8890*** ± 180	Gd-6432	8455-7589	bark	Marciniak 2001
Mszano	Poland	grave 1	***8680*** ± 130	Gd-6436	8207-7532	bark	Marciniak 2001
Mszano	Poland	grave 3	***8650*** ± 140	Lod 504	8208-7491	charcoal	Marciniak 2001
Mszano	Poland	grave 5	***8100*** ± 70	Gd-7932	7322-6822	charcoal	Marciniak 2001
Pomorsko	Poland	hearth pit	***7740*** ± 100	Gd-2704	7021-6412	charcoal	Kobusiewicz, Kabaciński 1991
Pomorsko	Poland	hearth pit	***7330*** ± 100	Gd-2700	6400-6020	charcoal	Kobusiewicz, Kabaciński 1991
Dudka	Poland	grave VI-8	***5690*** ± 25	KIA-19171	4584-4458	dog bone	Gumiński, Bugajska 2016
Dudka*	Poland	grave VI-17	***6645*** ± 30	Poz-3913	5629-5523	primary burial	Gumiński, Bugajska 2016

*grave without burned human bones, stratigraphically on the same level as grave VI-16

Table 2. Catalogue of Mesolithic and para-Neolithic cremation burials from the European Plain.

	Site	Region, country	Grave / pit / burial (individual)	Shape of pit/structure	Diameter (or length-width) / depth	Context	Other burials ***in the grave*** (at the site)	Number of burned individuals	Kind of cremation burial	Age and sex	Skeleton completeness
1	La Chaussée-Tirancourt	Seine Valley, France	pit 1	⬭	150 x 100 / 30	S, C?	(+☠)	3	S	adult; S (>45) I1 (3)	?
2	Concevreux	Seine Valley, France	pit 3	●	70 (-40) / 25	S	-	2	S	M; adult	?
3	Rueil-Malmaison	Seine Valley, France	burial 2	-	-	S, C?	(+P)	1	S?	adult	?
4	Abri des Autours	Belgium	collective burial AA2	●	100 / ?	RS, S	2 PD, (11 - PD, ☠)	***1***	S	young adult	3 (skull, feet)
5	Abri des Autours	Belgium	phalanxes deposit	-	-	RS, S	**2**☠	***1***	S	adult	hand phalanx
6	Dalfsen	Netherlands	pit 4	⬭	40 x 70	S, C?	-	1-2	S	M?, ♀? +child?	2 (upper part)
7	Oirschot 5, site 21	Netherlands	hearth (?) pit	●	50 / 45	S, Ξ?	-	1	S	I2 (10-13)	2?
8	Rotterdam	Netherlands	pit 58	●	90 / 24	S, C	-	1	S	adult? 10-40	2
9	Rotterdam	Netherlands	pit 59	●	110 / 40	S, C	-	1	S	adult? ♀? 12-40	4
10	Rotterdam	Netherlands	pit 60	●	85 / 10	S, C	-	1	S	adult? 10-34	2
11	Loschbour	Luxembourg	burial 2	-	-	RS	(+P)	1	S	M, ♀	3
12	Hammelev	Jutland, Denmark	grave 1	●	15 x 27 / 5-6	***sG***	-	1	S	adult	3/4?
12	Nivå 10	Zealand, Denmark	grave A144	⬮	25 / 8	S, C	(P, ☠)	1	S	♂, >30-35	4?
14	Nivå 10	Zealand, Denmark	grave A127	●	20 / 5	S, C	(P, ☠)	1	S	-	1?
15	Nivå 10	Zealand, Denmark	grave A128	●	60 / 14	S, C	(P, ☠)	1	S	adult	3/4?

	Amount of cremated bones (weight / number of fragments)	Colour of bones – way of burning	Deposition	Presence of container / wooden or stone structure	Burned grave goods *slight signs of burning	Unburned grave goods	Ochre	Charcoals (rests of pyre)	Period / culture	References
1	1500 g	?	⁂		(including backed blades, points), , hazelnuts?		✹	✓	l.M	Ducrocq *et al.* 1991; Ducrocq, Ketterer, 1995; Meiklejohn *et al.* 2010
2	-	?	●	⊗	- fox, pine and stone marten (caudal vertebra, lower extremities); vertebra of 2 pikes	50 , 6 wild boar tusks (one worked), 50 red deer canines		-	mM	Bosset, Valentin 2013; Meiklejohn *et al.* 2010; Naze, Robert 2006
3	215 g	w-g+UB (feet)	⁂ 40 m²	stones 12 m²		?		?	mM	Meiklejohn *et al.* 2010; Valentin *et al.* 2008
4		w	⁂					-	eM	Cauwe 2001; Polet, Cauwe 2002
5			●					-	eM	Cauwe 2001;
6			⁂		?			✓	mM	Meiklejohn *et al.* 2015; Verlinde 1974;
7	87 g / 199	w-g	●	wood? (Ps.)	*288* (3 points, 2 backed blades, 3 retouched blades, 2 endscrapers)			✓	mM; RMS	Arts, Hoogland 1987; Niekus *et al.* 2016; Toussaint *et al.* 2009
8	82 g	w	⁂		2g (skull); 8 (backed blade; point)	5		-	mM; RMS	Niekus *et al.* 2016
9	2001 g	w	⁂		808 (backed blade, 2 points); stone macehead*; polishing stone*	5 (1 backed blade), 2 stones		✓	mM; RMS	Niekus *et al.* 2016
10	151 g	w	⁂		4g (wild boar?), 7 (2 points)	1		-	mM; RMS	Niekus *et al.* 2016
11	390.4 g / 99	w-g	?		, *			?	mM	Toussaint *et al.* 2009
12		w	●	⊗	ulna, radius - wild cat, bone pin	flint axe, 14 - flakes	✓	-	eM; MC	Eriksen, Andersen 2016
12		w	●	⊗		1 - flake		-	mM, KC	Jensen 2016
14		-	●	-			✓	-	-	Jensen 2016
15		w	⁂/●					✓	mM, KC	Jensen 2016

	Site	Region, country	Grave / pit / burial (individual)	Shape of pit/structure	Diameter (or length-width) / depth	Context	Other burials ***in the grave*** (at the site)	Number of burned individuals	Kind of cremation burial	Age and sex	Skeleton completeness
16	Vedbæk Boldbaner	Zealand, Denmark	grave 2	●	10 x 15 / 8	S, C?	(+P)	1	S	♀? adult	2 (upper part)
17	Vedbæk Gøngehusvej	Zealand, Denmark	grave Æ	●	40 – 50 / 70	S, C	(+P)	1	S	♀? A	2 (upper part)
18	Vedbæk Gøngehusvej	Zealand, Denmark	grave N	●	40 / 15	S, C	(+P)	5	S	♂A ♀A I2, I1, I1	4 ind. - 4? I1 – 2/4?
19	Dammen	Bohuslän, Sweden	destroyed grave?	-	-	S	-	1	S	-	
20	Skateholm I	Scania, Sweden	grave 11	∴	6 m²	S, C	(P, ☠)	1	S	♂ M	3?
21	Skateholm I	Scania, Sweden	grave 20	●	-	S, C	(P, ☠)	1	S	-	2
22	Skateholm II	Scania, Sweden	grave XVIII	■	60	S, C	(P)	1	S?	♂S	3/4?
23	Strandvägen - Motala	Östergötland, Sweden	grave 1 / A42461	-	-	S, C	***1P,*** (+P, ☠)	***1***	S	-	1/2?
24	Strandvägen - Motala	Östergötland, Sweden	grave 7 / A49247	-	-	S, C	***1P***, (+P, ☠)	***1***	S	-	1/2?
25	Strandvägen - Motala	Östergötland, Sweden	grave 17 / A58207	-	-	S, C	***1P***, (+P, ☠)	***1***	S	-	?
26	Coswig	Saxony, Germany	grave 1 / pit 156A	●	35 – 40 / 15	***sG***, S?	-	1	S	adult (ca. 29)	2
27	Pomorsko	Lubusz Land, Poland	hearth pit	-	-	S, Ξ	-	1	S	child	?
28	Mszano	Dobrzyń Land, Poland	grave 1	⬭	90 x 200 / 120	S, C	?	2	***P***	♀A, I1	4?
29	Mszano	Dobrzyń Land, Poland	grave 3	⬭	200 x 90 / 140	S, C	?	1	***P***	I1	4?
30	Mszano	Dobrzyń Land, Poland	grave 5	⬭	250 x 150 / 160	S, C	?	1	***P***	-	4?
31	Wieliszew	Mazovia, Poland	skull	-	-	S	-	1	S	♂A	1 (skull)

	Amount of cremated bones (weight / number of fragments)	Colour of bones – way of burning	Deposition	Presence of container / wooden or stone structure	Burned grave goods *slight signs of burning	Unburned grave goods	Ochre	Charcoals (rests of pyre)	Period / culture	References
16		w	●					✓	mM; KC	Vang Petersen 1977; Brinch Petersen, Meiklejohn 2003
17		w	●	◉	1 ▮ - blade	roe deer fawn (on ♀), 1 ▮ - blade (on ◉)		-	mM; KC	Brinch Petersen, Meiklejohn 2003
18		b-w	●		5 ▮ - red deer, 5 ▲ C/V, 🐟, 🐿, 1 amber, 3 ▮ - blades		✓	✓	mM; KC	Brinch Petersen, Meiklejohn 2003
19			⁂ few m²					?	eM; MC	Sjögren, Ahlström 2016
20			⁂ 10 m²	‖	🦴 (mixed with human): seal, wild boar, 🐿, 🐟, phalanges – C/V			✓	l.M; EC	Larsson 1980; 1989; Niemi 2001; Nilson-Stutz 2003;
21								-	l.M; EC	Larsson 1982; Nilson-Stutz 2003
22	1097 g	uneven	●	⊗ stones	flint axe?			-	l.M; EC	Larsson 1983; Nilson-Stutz 2003; Persson, Persson 1988
23			⁂↑PI					?	mM	Gummesson, Molin 2016
24			⁂PI					?	mM	Gummesson, Molin 2016
25			⁂?					?	-	Gummesson, Molin 2016
26	30 g	w	⁂					✓	mM	Küßner, Schunke 2016
27		?	●/⁂			▮?		?	mM	Kobusiewicz, Kabaciński 1991
28		partial burning		⥁		16 frag. ▮ wild boar ▲ frag., 1 amber	✓	✓	eM	Marciniak 2001
29		partial burning		☰ ⥁		>100 frag. ▲ (elk, red deer, aurochs) chalk stone with hole			eM	Marciniak 2001
30		partial burning		☰ ⥁		2 ▮ - microliths, ▲ frag., 2 amber		✓	eM	Marciniak 2001
31		yW	⁂			▮?		-	l.M	Tomczyk *et al.* 2019; Wiercińska, Szlachetko 1977