

## Supplementary Materials for

### **Dynamic changes in genomic and social structures in third millennium BCE central Europe**

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## **Archaeological background**

While this study is devoted primarily to archaeogenetic data it is important to briefly summarise the archaeological background and context of the presented datasets and research questions, namely in the „old fashioned“ and maybe „long-outdated“ (38) but still broadly accepted culture-historical way of „archaeological cultures“ (Table S38, Fig. 1; see the last handbooks to Bohemian prehistory (49, 50, 59)), by understanding them actually rather as “archaeological units of classification” (mainly of artefact styles, burial practices etc.) than in the sense of recently rightly criticised „distinct groups of people“ (21, 33, 37, 38, 40, 95, 96).

The region of focus concerns the northern part of Bohemia, the basins of the Elbe, lower Vltava and Ohře rivers and the Bohemian part of the Ore Mountains. South and west Bohemia were not settled densely before the EBA. Before the Neolithic, these mainly forested regions at higher elevations were occupied by late Mesolithic hunter-gatherer groups, who may have persisted for some time during the Eneolithic (97).

The Bohemian Stone Age prehistory is divided into two basic epochs: the Neolithic (ca. 5400–4400 BC) and Eneolithic (ca. 4400–2200 BC). The Neolithic is represented by the Linear Pottery (LBK, in Bohemia ca. 5400/5300–5000 BC) and Stroked Pottery cultures (STK, ca. 5000–4400 BC). There is broad consensus that the STK was derived from the LBK, without influence from outside (49).

The emergence of the Lengyel culture (ca. 4400–4200 BCE) (49) is regarded as a culture-historical turning point and marks the beginning of the Eneolithic in Bohemia (50) triggered by the arrival of a new population from the southeast (Moravia, Austria, Pannonia, southwest Slovakia). The Jordanów culture (ca. 4200–3900 BC) is also included in the initial proto-Eneolithic period. Although culturally tied to the preceding Lengyel development, elements from the western Michelsberg culture are strongly manifested in the later phase. The status of the Michelsberg culture in prehistoric Bohemia is unclear, as Bohemia is on the boundary of two cultural traditions/phenomenons, the eastern Lengyel and western Michelsberg. Consequently, some scholars considered Michelsberg an autonomous entity, others a foreign influence into local Jordanów and older Funnel Beaker (Baalberge) culture (98, 99). From Jordanów/Michelsberg contexts exist first evidence of burials under barrows (Březno u Loun (100)), assumed also for the Funnel Beaker period and later on a mass scale for the CW and BB (50), alternatively for the EBA (101).

The Early Eneolithic (ca. 3800–3400 BC) is represented by the Funnel Beaker culture (Baalberge, incl. Siřem-stage). More than one hundred single inhumation burials in a crouched position and tens of burials in settlement features are recorded. The single graves with skeletons in a crouched position are characteristic since neolithic (LBK, STK) and as such for the entire Bohemian Eneolithic and EBA. Collective graves, which are typical for the Funnel Beaker in northern Europe, are absent in Bohemia completely.

The Middle Eneolithic (ca. 3400–2800 BC) was a period of cultures associated with the Baden cultural complex. The earliest stage of Baden in Bohemia (Boleráz) is thought to present a new population from the core of the Baden cultural complex in Carpathian Basin (102). In the following horizon, the late Funnel Beaker culture (Salzmünde (103)) is replaced by the classic Baden culture, from which the local post-Baden cultures develop: Řivnáč in central and northwest Bohemia, Bošáca in east Bohemia and Cham in west Bohemia (all ca. 3100–2800 BC). Inhumation graves during this period were quite rare (e.g. Holubice in this study) and the available anthropological material comes mainly from settlement features (sunken pits, semi-sunken huts etc.).

The Globular Amphora culture (GAC) extended into Bohemia as a new entity during the final Middle Eneolithic and its bearers are unanimously regarded as newcomers from the north. The GAC was partially contemporaneous with post-Baden Řivnáč and Cham cultures (GAC pottery was repeatedly found in settlements of both) (56) and is manifested by few burials of individuals in a crouched position. Regarding the possible coexistence of Řivnáč and GAC in Bohemia two possible scenarios were discussed. Firstly, the contemporaneous occupation by exploitation of different territories by more or less complete replacement of the Řivnáč settlement by the GAC in the late phase, secondly infiltration of GAC-people into the Řivnáč society (56, 104).

A distinct turning point in cultural development was the emergence of Late Eneolithic Beaker phenomena: Corded Ware (CW; ca. 2900/2800–2400 BC) and Bell Beaker (BB; ca. 2500–2200 BC). Both had a large geographic distribution in Europe, with the CW in central and NE Europe and BB in central, north- and southwestern and southern Europe. The CW in Bohemia is almost exclusively limited to grave finds with skeletons in a crouched position in W-E orientation with females on their left side, and males on their right side. While the number of investigated graves is one of the highest in Bohemian prehistory (ca. 1,500 graves), human skeletal material has not been preserved in all of them. Views on the origin of the CW differed greatly, from migration models (57, 105) to a purely autochthonous emergence (106), as did opinions on the subsistence, which ranged from a culture of settled farmers (107), to a pastoral nomadic character (108). The CW in Bohemia was not uniform over time, and three phases can be distinguished archaeologically: early (A-horizon, Kalbsrieth-type graves), middle (“Fischgrätenbecherhorizont”) and late (local Bohemian Corded Ware) – material groups 1 – 3 after M. Buchvaldek (109).

The Bell Beaker phenomenon (BB) in Bohemia is represented by hundreds of documented inhumation and cremation burials (ca 10 %). The inhumation ritual stands in contrast to the Corded Ware with males mostly in a left-crouched position, and females mainly in a right-crouched position, in N-S orientation. Various interpretations exist about the origin of the BB in Bohemia, both allochthonous (Iberian Peninsula Northern Africa, Lower Rhine Region, etc.) and autochthonous, with advocates of both theories in Czech archaeology (58, 110, 111). A typochronology of BB should be compiled from graves containing decorated beakers (early stage) towards graves with so-called “associated pottery” – late stage. In Bohemia, this so-called “associated pottery” (“Begleitkeramik”) is very similar to the pottery of the early phase of the EBA Únětice culture, which has been interpreted as evidence of continuity in material culture between the two.

The central European EBA is characterised by the so-called Únětice culture, mostly known from thousands of inhumation graves in a N-S-oriented, right-crouched position facing east and with no apparent gender differentiation in orientation (unlike the CW and BB). Bohemia can be considered its core area. Traditionally it is separated into two main parts: early (proto-Únětice and pre-classic phases) and late (classic to post-classic) phases after ~2000 BCE (59, 112, 113). The late (classical) phase is characterised by large hoard finds, typical Únětice cups, eyelet pins (Ösenkopfnadeln) and large cemeteries with inhumation burials rich in bronze artefacts, amber and gold jewellery and other exotics (60, 75, 77, 114–117). There is no continuity at many cemetery sites from the early to the late phase. Early Únětice grave groups are smaller (mostly less than 10–15 graves), graves contain almost exclusively vessels, and only rarely copper wire artefacts.

The only one Middle Bronze Age (MBA) individual which we have incorporated in our study is that from the only one burial of this age from the important site Vliněves, grave 504 (VLI053), containing female

skeleton in age of 50+ years buried with two typical MBA bronze pins. In the qpAdm modelling we group this skeleton with Bohemia\_Unetice\_Classical samples.

**Table S38. Chronological framework of the periods and archaeological cultures discussed in the text.**

Period	Archaeological culture	Phase	cal. BC
Neolithic	Linear Pottery (LBK; Linearbandkeramik)		5400/5300-5000/4900
	Stroked Pottery (STK; Stichbandkeramik)		5000/4900-4400/4300
Eneolithic	Lengyel		4400/4300-4300/4200
	Jordanów / early Michelsberg		4300/4200-3900/3800
	late Michelsberg / Funnel Beaker		3900/3800-3500/3400
	Baden		3500/3400-3200/3100
	Řivnáč / Cham / Bošáca		3200/3100-2900/2800
	Globular Amphora		3000/2900-2900/2800
	Corded Ware		2900/2800-2500/2400
	Bell Beaker		2500/2400-2200/2100
EBA	Únětice (Aunjetitz)	early	2300/2200-2000/1950
		late	2000/1950-1750/1700

### ***Sampled sites in Bohemia***

Site numbers correspond to numbers on the maps (Figures S1-S5) and in Table S2.

blue – published in (4, 5, 61, 62)

1. Bílina – published (61)
2. Blšany
3. Brandýs nad Labem
4. Brandýsek – published (5)
5. Březno u Loun
6. Čachovice
7. Droužkovice
8. Holubice
9. Hostivice
10. Chleby
11. Kněževes 1 – published (4, 5)
12. Kněževes 2
- 13–16. Kolín, road bypass, Sites I, II, VI and VII
- 13.1. Kolín, road bypass, Site I-3 – published (62)
- 13.2. Kolín, road bypass, Site I-7a – published (62)
- 13.3. Kolín, road bypass, Site I-7b
14. Kolín, road bypass, Site II
15. Kolín, road bypass, Site VI - Polepy
16. Kolín, road bypass, Site VII
17. Kolín - Štáralka
18. Konobrže
19. Lochenice – published (4, 5)
20. Lovosice – published (4, 5)
21. Makotřasy
22. Mikulovice
23. Neratovice
24. Obříství
25. Plotiště nad Labem
26. Praha - Ďáblice
- 27.1. Praha - Jinonice
- 27.2. Praha - Jinonice, Holman's garden centre – published (5)
28. Praha - Jinonice, Butovická St. – published (5)
29. Praha - Kobylisy, Ke Stírce St. – published (5)
30. Praha - Malá Ohrada
- 30.1. Praha - Malá Ohrada (CW)
- 30.2. Praha - Malá Ohrada (BB) – published (5)
31. Praha - Miškovice
32. Praha - Nové Butovice
33. Praha - Ruzyně
34. Předměřice nad Labem

- 35.1. Radovesice
- 35.2. Radovesice – published (5)
- 35.3. Radovesice – published (61)
- 36. Roudnice nad Labem
- 37. Stadice
- 38. Tišice
- 39. Toušeň
- 40. Trmice
- 41. Tuchoměřice
- 42.1. Velké Přílepy
- 42.2. Velké Přílepy – published (4, 5)
- 43. Velké Žernoseky – published (61)
- 44. Vliněves
  - 44.1. Vliněves – Eneolithic (pre-CW)
  - 44.2. Vliněves – Corded Ware
  - 44.3. Vliněves – Bell Beaker
  - 44.4. Vliněves – Early Bronze Age
- 45. Zeleneč

### **Radiocarbon dating**

In this study we report 230 radiocarbon data in total from 197 skeletons found in 178 graves or settlement sunken features. We include previously published (n=90) as well as new data (n=140) generated in 12 different radiocarbon laboratories (Table S6):

- Curt-Engelholm-Zentrum Archaeometrie (MAMS) – 116
- Pennsylvania State University (PSUAMS) – 39
- Czech Radiocarbon Laboratory (CRL) – 32
- Leibnitz-Labor Kiel (KIA) – 11 and (KI) – 3
- Centre for Climate, the Environment and Chronology, Queen's University of Belfast (UBA) – 10
- Utrecht van de Graaff Laboratorium (UtrC) – 6
- Centre for Applied Isotope Studies, The University of Georgia (UGAMS) – 5
- Centre for Isotope Research, University of Groningen (GrN) – 3
- Poznań Radiocarbon Laboratory (Poz) – 3
- Bristol Radiocarbon Accelerator Mass Spectrometer (BRAMS) – 1
- Berlin (Bln) – 1

The 197 dated skeletons date to the Neolithic (n=5), preCW Eneolithic (n=33), CW (n=51), BB (n=37) and the EBA (n=71; 32 of them to the early and 39 to the late/classical stage of the Únětice culture). For Řivnáč, GAC, CW, BB and both stages of the EBA Únětice culture (AK1 and AK2) the 14C data were modelled to create time-intervals of duration of these cultural phenomena (Fig. S8).

In Table S6 we have collated all available 14C data relevant to individuals/graves represented in this study, including from human bones (n=220), animal bones (n=9) macro remains (n=1), and older (no AMS) as well as newer ones (AMS). For the sake of completeness, we also list samples that contained low ratios or no collagen (n=5), and one sample which was lost during the procedure. Table S6 also includes all supporting data such as  $\delta^{13}\text{C}$ , C:N, C /%, collagen /% and bone specifications where available.

In cases where dates from human and animal bones were available from the same grave, we used the date from human bones. Where both AMS and no-AMS data were available from the same skeleton, we used the AMS date. Dates that were not used (from animal bones or no-AMS data) are highlighted in grey. These were only taken into consideration when it was the only available data from the individual grave/skeleton. Where more than one AMS date from the same skeleton was available, we used the modelled mean value.

On the basis of the new results, we briefly comment on dates from three graves:

21. Maková, settlement pit 51/61. From this settlement feature three 14C data were produced, one from human bone (PSUAMS-4404, 4228–3988 2-sigma cal BCE) and two earlier non-AMS dates from animal bones (GrN-6928, 3623–2926 2sigma cal BCE; GrN-6929, 3635–3371 2-sigma cal BCE). The date from the human bone is significantly older than both earlier dates from animal bones. Although the dates from both animal bones would fit much better to the finds from the pit filling and also compared with the data from other skeletons from this site, we accept here the direct date from the human bones.

24. Obříství, grave 1. In grave 1 a female and a newborn child were buried (based on aDNA kinship analyses a first-degree mother/child relationship). Based on the first AMS dates of both individuals (MAMS-30794

– 4276 ±22 BP and MAMS-38471 – 3941 ±25 BP), the date from the newborn was significantly younger than the date from the mother (interval of 335 years BP) and the calibrated 2-sigma intervals showed no overlap (Fig. S9: green). Hence, we commissioned additional dates from both skeletons, in this case directly from the both petrous bones, from where aDNA was sampled, which documented the first-degree relatedness between both. However, also the second series of dates (MAMS-41363 and MAMS-41364) showed no overlap of the 2-sigma intervals (Fig. S9: orange). In this case the date from the newborn (3861 ±34 BP) was also younger than the date from the mother (4064 ±23 BP). For each skeleton we have modelled the mean value of both 14C data. The resulting 2-sigma intervals for the mother (2881–2674 cal BCE) and the child (2469–2305 cal BCE) show also no overlap. The fifth 14C AMS date was produced from a decorated bone disc found with the mother (BRAMS-2959) and shows a 2-sigma interval of 2617–2467 cal BCE. At this stage, we have not reached a final interpretation of the 14C data from this grave complex other than an in-depth evaluation of all lines of evidence will be necessary, especially since both dates from the mother (MAMS-30794 and MAMS-41363) have failed a chi-squared test with a less than 5% chance this being a good combination.

44.2. Vlinēves, grave 5790. The first 14C wider date (CRL-9201; 2861–2148 2-sigma cal BCE) was not generated with AMS. The newly created AMS (MAMS-41359; 2286–2138 2-sigma cal BCE) results dating to the EBA is considered too young/late in our opinion, as the grave is more in line with the CW period according to position of the body and the grave goods (upper part of big amphora). Thus, a third sample was taken directly from the petrous bone, which was sampled for aDNA. This produced a date (MAMS-46362; 2473–2311 2sigma cal BC), which is in line with the archaeological context and the genetic results.

## **Detailed site descriptions and anthropological information**

### **1. Bílina, Titzler sandpit (Bílina, Teplice district, NW-Bohemia, Czech Republic)**

*Published in (61)*

The site was being destroyed by sand pitting for a long time and a large number of graves from the Eneolithic up to the Early Middle Ages have been documented. However, many other graves have been destroyed without any evidence. Eneolithic graves were mostly uncovered at the beginning of the 20th century, when little attention was usually paid to anthropological material; therefore, any human remains rarely appeared in museum collections (118). The original number of Eneolithic graves on this site can be estimated at several dozen (119).

Grave from 1903. The skeleton was delivered along with three vessels belonging to the middle or late stage of the Corded Ware culture; the dating of skeletal material is, therefore, not very reliable. Only the skull has been preserved. Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: adultus (30–40?). Grave goods: amphora, jug, small pot (potentially, there might have been more vessels). Archaeological dating: Corded Ware culture, middle/late stage. Radiocarbon dating: not available (61, 118, 119). Master ID and/or other aDNA signs: I6695, BILI\_139. NM Prague Inv. No.: P7A 7564.

Grave from 1910. Two skeletons in crouched(?) position – a man and a woman – lying probably in a grave next to each other, in east-west orientation. Only the male skeleton (I6677; P7A 7558) has been analysed. Sex: archaeology – ?, anthropology – M, aDNA – M. Age: adultus II – maturus I (30–50). Grave goods: decorated amphora. Archaeological dating: Funnel Beaker culture (late Baalberge). Radiocarbon dating: not available (61, 118, 120). Master ID and/or other aDNA signs: I6677, BILI\_4. NM Prague Inv. No.: P7A 7558.

### **2. Blšany (Blšany u Loun, Louny district, NW Bohemia, Czech Republic)**

*Contact persons: Miroslav Dobeš, Petr Velemínský*

An inhumation burial was investigated in the wall of the sandpit in 1957 (J. Šimůnek). The grave was entirely preserved; only its northern part was slightly disturbed by mining activities. In addition to the grave goods described below, the grave fill contained finds of settlement character (potsherds, animal bones, fragment of grinder stones, etc.), too. Among them, pottery of the Globular Amphora culture was identified. Although the skeleton originally identified as an adult male (see (121), based on skull traits), pelvic traits identified by modern investigation suggest it probably belongs to a female individual (*P. Velemínský*) which is consistent with the results of the aDNA analysis. The grave was published in full in (122, 123).

Grave 1. Grave with two burials

Skeleton 1: right-sided crouched burial, head towards the north. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: adult (20–40?). Grave goods: two-handled amphora, four-handled amphora, cup, pot, fragments of other vessels. Archaeological dating: Globular Amphora culture, western group. Radiocarbon dating: MAMS-41369 (4126±24) 2865–2583 cal BC 2-sigma (121-123). Pandora No.: BLS001. NM Prague Inv. No.: P7A 31831A.

Skeleton 2: left-sided crouched(?) burial, head towards the north. Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: fetus or newborn. Grave goods: see skeleton 1. Archaeological dating: Globular Amphora culture, western group. Radiocarbon dating: MAMS-41370 ( $4141 \pm 22$ ) 2871–2627 cal BC 2-sigma (*121-123*). Pandora No.: BLS002. NM Prague Inv. No.: P7A 31831B.

3. Brandýs nad Labem (Brandýs nad Labem – Vrábí, Prague-East district, central Bohemia, Czech Republic)

*Contact persons: Michaela Langová, Alžběta Danielisová, Petra Stránská*

The enclosed Early Bronze Age (BA2) settlement site in Brandýs nad Labem - Vrábí has been excavated by A. Danielisová, M. Pecinovská, K. Čuláková and D. Malyková (Institute of Archaeology of the Czech Academy of Sciences, Prague) between the years 2007 and 2016. Within the enclosed area, A. Danielisová uncovered an Early Únětice culture cemetery (BA1) in 2007. It contained multiple graves (33 skeletons in 13 graves), clearly earlier than the enclosure itself. Additional, isolated graves were spread over the site, along with some “irregular” burials in settlement pits. Ten individuals from two Early Únětice graves (nos. 63 and 76), two individuals from a tumulus (No. 690) and one individual from a settlement pit (No. 798) were analysed for aDNA. The cemetery, as well as the settlement, were analysed by M. Langová (*124, 125*) and already partly published (*101, 126, 127*).

Grave 63. Grave pit with four skeletons. Two child skeletons in crouched position (skeletons 3 and 4), apparently related, were found in a niche in the western part of the grave. A coincidental superposition of two independent graves cannot be ruled out.

Skeleton 1. Skeleton (upper): right-sided crouched burial, head towards the south. Sex: anthropology – F?, aDNA – F. Age: adultus I (20–35). Grave goods: two vessels (which could also belong to skeleton 2) – a cup with fringe decoration and a small jug; two animal bones (scapulae). Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: MAMS-30775 ( $3677 \pm 21$ ) 2137–1980 cal BC 2-sigma (*124*). Pandora No.: BNL001. NM Prague Inv. No.: P7A 42041.

Skeleton 2. Skeleton (lower): crouched position, partly disrupted, head towards the south. Sex: anthropology – F?, aDNA – M. Age: adultus II (30–40). Grave goods: see skeleton 1. Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: not available (*124*). Pandora No.: BNL002. NM Prague Inv. No.: P7A 42042.

Skeleton 3. Skeleton: left-sided crouched burial, head towards the south, incompletely preserved. Sex: anthropology – child, aDNA – M. Age: infans (1.5). Grave goods: no finds. Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: MAMS-30776 ( $3661 \pm 24$ ) 2135–1955 cal BC 2-sigma (*124*). Pandora No.: BNL003. NM Prague Inv. No.: P7A 42043.

Skeleton 4. Skeleton: crouched burial, head towards the south, incompletely preserved. Sex: anthropology – child, aDNA – M. Age: infans (7.5–9.5). Grave goods: no finds. Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: not available (*124*). Pandora No.: BNL004. NM Prague Inv. No.: P7A 42044.

Grave 76/204. Situated (in a superposition?) in (above?) the middle of a settlement pit (No. 76). Three people were gradually deposited here. Skeletons 2 and 3 were buried below skeleton 1. According to the find context, the original presence of a coffin or organic box is highly probable.

Skeleton 1. Skeleton (upper): right-sided crouched burial, head towards the south. Sex: anthropology – juvenis, aDNA – F. Age: juvenis ( $17\pm2$ ). Grave goods: an undecorated cup. Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: MAMS-30777 ( $3738\pm23$ ) 2206–2038 cal BC 2-sigma (124). Pandora No.: BNL005. NM Prague Inv. No.: P7A 42146/1.

Skeleton 2. Skeleton: below skeleton 1, in a non-anatomical position. Sex: anthropology – M, aDNA – M. Age: adultus II – matus I (30–45). Grave goods: no finds. Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: not available (124). Pandora No.: BNL006. NM Prague Inv. No.: P7A 42146/2.

Skeleton 3. Skeleton: below skeleton 1, in a non-anatomical position. Sex: anthropology – M, aDNA – M. Age: matus II (40–50). Grave goods: no grave goods. Archaeological dating: Early Únětice culture (BA1). Radiocarbon dating: not available (124). Pandora No.: BNL007. NM Prague Inv. No.: P7A 42146/3.

Grave 690. The settlement pit, secondarily enlarged and used for burying. It contained two skeletons in crouched position on their right side, heads towards the south. Skeleton 1 was situated above skeleton 2, separated by ca. 0.4 m of grave fill. Due to a circle of massive stones situated around the pit, the whole feature was originally reported as a tumulus.

Skeleton 1. Skeleton (upper): right-sided crouched burial, head towards the south. Sex: anthropology – child, aDNA – F. Age: infans (11–13). Grave goods: a simple bronze temple ring, the front right paw of a dog. Archaeological dating: Late Únětice culture (BA2). Radiocarbon dating: MAMS-30778 ( $3615\pm26$ ) 2035–1896 cal BC 2-sigma; CRL-11260 ( $3716\pm83$ ) 2432–1891 cal BC 2-sigma; CRL-11194 ( $3540\pm112$ ) 2201–1614 cal BC 2-sigma (101, 124, 126, 127). Pandora No.: BNL008. NM Prague Inv. No.: P7A 42153/1.

Skeleton 2. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – M, aDNA – M. Age: adultus II – matus I (35–50). Grave goods: deep bowl with a horizontal handle. Archaeological dating: Late Únětice culture (BA2). Radiocarbon dating: MAMS-30779 ( $3649\pm24$ ) 2132–1944 cal BC 2-sigma. Radiocarbon date from macroremains – Poz-47314 ( $3640\pm35$ ) 2135–1912 cal BC 2-sigma (101, 124, 126, 127). Pandora No.: BNL009. NM Prague Inv. No.: P7A 42153/2.

Grave 798. A skeleton in a non-standard position in the settlement pit. The right arm of the skeleton was cut off and the leg was disjointed. Sex: anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: No grave goods related to the skeleton, numerous potsherds in the fill of the pit. Archaeological dating: Late Únětice culture (BA2). Radiocarbon dating: MAMS-30780 ( $3505\pm25$ ) 1897–1749 cal BC 2-sigma. Literature (124, 126, 127). Pandora No.: BNL010. NM Prague Inv. No.: P7A 42155.

#### 4. Brandýsek (Brandýsek, Kladno district, central Bohemia, Czech Republic)

*Published in (5)*

The Eneolithic cemetery in the sandpit of Brandýsek was excavated by O. Kytlicová in 1955–1958. Before this excavation, many graves were destroyed by sand pitting, the known cemetery is, therefore, hardly

complete. According to Kytlicová, about one half of the graves were preserved. In addition to a Neolithic settlement, Roman Iron Age cemetery and medieval graves, the excavation area of roughly 0.15 ha revealed at least two inhumation graves of the Funnel Beaker culture (one analysed by aDNA), 5–6 inhumation graves of the Corded Ware culture (two analysed) and 22 inhumation graves of the Bell Beaker culture (9 burials from 8 inhumation graves analysed). The Eneolithic cemetery was published in full (*128*). For a spatial analysis of the site see (*129*).

Grave 3. Skeleton: heavily damaged by a bulldozer, the position and orientation could not be determined. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: juvenis (15–20). Grave goods: cup and fragments of two other cups. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-4499 (3670±20 BP) 2136–1977 cal BC 2-sigma (*5, 128*). Master ID and/or other aDNA signs: I7249, BRAN\_3. NM Prague Inv. No.: P7A 31479.

Grave 4. Skeleton: right-sided crouched burial, disturbed, head towards the south. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: adultus (20–30). Grave goods: polypod bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (*5, 128*). Master ID and/or other aDNA signs: I7250, BRAN\_4. NM Prague Inv. No.: P7A 31480.

Grave 8. Skeleton: heavily disturbed, head towards the north. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (7–15). Grave goods: fragments of bowl. Archaeological dating: Bell Beaker culture, middle/late stage. Radiocarbon dating: not available (*5, 128, 130*). Master ID and/or other aDNA signs: I7251, BRAN\_8. NM Prague Inv. No.: P7A 31615.

Grave 12. Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: juvenis (15–18). Grave goods: no finds. Archaeological dating: Bell Beaker culture. Radiocarbon dating: not available (*5, 128, 130*). Master ID and/or other aDNA signs: I7269, BRAN\_12. NM Prague Inv. No.: P7A 31619.

Grave 19. Grave with two burials.

Skeleton 19A: right-sided crouched burial, head towards the south-west. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: see burial 19B. Archaeological dating: Bell Beaker culture, middle/late stage. Radiocarbon dating: not available (*5, 128*). Master ID and/or other aDNA signs: I7270, BRAN\_19A. NM Prague Inv. No.: P7A 31626A.

Skeleton 19B: left-sided crouched burial, head towards the north-east. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: adultus II – matus I (30–50). Grave goods: decorated bell beaker, cup, bowl. Archaeological dating: Bell Beaker culture, middle/late stage. Radiocarbon dating: not available (*5, 128, 130*). Master ID and/or other aDNA signs: I7271, BRAN\_19B. NM Prague Inv. No.: P7A 31626B.

Grave 23. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (4–6). Grave goods: small beaker, cow pelvis. Archaeological dating: Funnel Beaker culture (Baalberge). Radiocarbon dating: PSUAMS-4239 (4715±20 BP) 3630–3377 cal BC 2-sigma (*5, 128, 130*). Master ID and/or other aDNA signs: I7272, BRAN\_23. NM Prague Inv. No.: P7A 31630.

Grave 26. Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – M, anthropology – M, aDNA – M. Age: matus (40–60). Grave goods: bowl, bone pendant. Archaeological

dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 128, 130). Master ID and/or other aDNA signs: I7275, BRAN\_26. NM Prague Inv. No.: P7A 31633.

Grave 34. Skeleton: heavily disturbed, the position and orientation of the skeleton could not be determined. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: infans (2–3). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 128, 130). Master ID and/or other aDNA signs: I7276, BRAN\_34. NM Prague Inv. No.: P7A 31641.

Grave 71. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – maturus I (30–50). Grave goods: jug, cup, bowl, small copper dagger, chipped industry – four arrowheads and two flakes. Archaeological dating: Bell Beaker culture, middle/late stage. Radiocarbon dating: PSUAMS-4349 ( $3890 \pm 20$  BP) 2464–2299 cal BC 2-sigma (5, 128, 130). Master ID and/or other aDNA signs: I7278, BRAN\_71 NM Prague Inv. No.: P7A 31677.

Grave 74. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (5–6). Grave goods: beaker, amphora. Archaeological dating: Corded Ware culture, late stage. Radiocarbon dating: not available (5, 128). Master ID and/or other aDNA signs: I7279, BRAN\_74. NM Prague Inv. No.: P7A 32160.

Grave 78. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (3–4). Grave goods: beaker. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: not available (5, 128). Master ID and/or other aDNA signs: I7280, BRAN\_78. NM Prague Inv. No.: P7A 32163.

## 5. Březno u Loun (Březno u Loun, Louny district, NW Bohemia, Czech Republic)

Contact person: *Miroslav Dobeš*

The long-term ('systematic') excavation of a multicultural site (evidence of residential and burial activities from the Neolithic up to the Early Middle Ages) in 1966, 1969–1970 and 1973–75. Among other finds, remains of two Proto-Eneolithic megadendric long barrows (I. Pleinerová) were also uncovered. Although their above-ground parts were not preserved, their area was delimited by peripheral trenches cut into the subsoil. The first of these (barrow 62) was ca. 24 m long and 3 m wide, with two Eneolithic graves located inside along its axis. Based on 14C dates, the grave in the front of the barrow (LXXIII) was primary, while the grave in the middle was added later (LXXV). The second barrow (No. 86) was ca. 144 m long and 4 m wide. Primary grave (CXV) was located in its front. Elongated grooves found in the subsoil inside the barrow, parallel to its longitudinal axis, were interpreted as plough marks. According to the stratigraphic contexts, they could chronologically correspond to the period of the barrow construction. Large numbers of additional graves (Corded Ware culture, Bell Beaker culture, Únětice culture) were found 'inside' of both barrows, being also oriented along their longer axes, i.e. in the east-west direction. These later burials were apparently inserted into the mounds intentionally, when the mound bodies were still visible on the ground surface. Both barrows have been published in detail in (100, 131).

Long barrow, feature no. 62, grave LXXIII. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – ?, anthropology – M, aDNA – M. Age: maturus II (50–60). Grave goods: small bowl/cup. Archaeological dating: Jordanów/Michelsberg culture. Radiocarbon dating: GrN-8803

(5090±45) 3974–3783 cal BC 2-sigma; MAMS-41371 (5078±25) 3956–3799 cal BC 2-sigma (*100, 131*). Pandora No.: BRZ001. NM Prague Inv. No.: P7A 35523.

Long barrow, feature no. 62, grave LXXV. Skeleton: left-sided crouched burial, head towards the west. Sex: archaeology – ?, anthropology – M?, aDNA – F. Age: maturus II (50–60). Grave goods: no finds. Archaeological dating: Funnel Beaker culture. Radiocarbon dating: MAMS-41372 (4768±26) 3638–3390 cal BC 2-sigma (*100, 131*). Pandora No.: BRZ002. NM Prague Inv. No.: P7A 35525.

Long barrow no. of feature 86, grave CXV. Skeleton: right-sided crouched burial, head towards the east. Sex: archaeology – ?, anthropology – F?, aDNA – no aDNA. Age: adultus I (20–30). Grave goods: small bowl. Archaeological dating: Jordanów/Michesberg culture. Radiocarbon dating: not available (*100, 131*). Pandora No.: BRZ003. NM Prague Inv. No.: P7A 37013.

## 6. Čachovice (Čachovice, Chomutov district, NW Bohemia, Czech Republic)

*Contact persons: Miroslav Dobeš, Petr Velemínský*

The site was uncovered during a rescue excavation of Z. Smrž in front of an open-cast brown coal mine in 1980–1982. Next to the Neolithic settlement, remains of a Proto-Eneolithic or Early Eneolithic long barrow were found, as well as cemeteries of the Corded Ware and Bell Beaker cultures. The Corded Ware cemetery consisted of three clearly separated groups, with 59 graves and 60 inhumation burials altogether. In addition to pottery, the graves were furnished with lithic axes, axe-hammers and clubs, whetstones, chipped industry and even some bone and copper artefacts. According to the finds, the graves date to both the early and late periods of the Corded Ware culture. The Bell Beaker cemetery (21 inhumation graves) belonged to the late period of this culture; some of the graves clearly disturbed the Corded Ware grave pits. With the exception of the Neolithic settlement, all finds from this site were published in full (*132*). The cemetery was analysed for aDNA very selectively due to the poor preservation state of bones.

Grave 3. Skeleton: right-sided crouched burial, head towards the north-west. Sex: archaeology – M, anthropology – M?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: beaker, amphora, stone club, stone axe, silicite axe, chipped industry – three flakes. Archaeological dating: Corded Ware culture, middle/late stage. Radiocarbon dating: not available (*132*). Pandora No.: CAH001. NM Prague Inv. No.: P7A 38560.

Grave 7. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F, aDNA – no aDNA. Age: adultus I (20–30). Grave goods: amphora, jug, pot, single-handled cup, two-handled cup, two copper spiral temple rings, copper beads, chipped industry – one blade, whetstone. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (*132*). Pandora No.: CAH002. NM Prague Inv. No.: P7A 38563.

Grave 10. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – no aDNA. Age: maturus I (40–50). Grave goods: amphora, jug?, stone battle axe, stone flat axe, chipped industry – two blades. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (*132*). Pandora No.: CAH003. NM Prague Inv. No.: P7A 38565.

Grave 11A. Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – F, anthropology – M, aDNA – no aDNA. Age: adultus I (20–30). Grave goods: amphora, jug, pot, two-handled

cup, copper spiral temple ring, copper bead. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (132). Pandora No.: CAH004. NM Prague Inv. No.: P7A 38566.

Grave 12. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus I (20–30). Grave goods: amphora, jug/cup, stone battle axe, chipped industry – blade, bone awl, boar/pig tusk. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-41377 ( $3917 \pm 26$ ) 2474–2306 cal BC 2-sigma (132). Pandora No.: CAH005. NM Prague Inv. No.: P7A 38568.

Grave 14. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: amphora, beaker, beaker with a handle, stone club, stone flat axe, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (132). Pandora No.: CAH006. NM Prague Inv. No.: P7A 38569.

Grave 24A. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: two amphorae, jug, pot, chipped industry – blade, animal bones (drilled teeth?), whetstone. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (132). Pandora No.: CAH007. NM Prague Inv. No.: P7A 38576.

Grave 35. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – no aDNA. Age: adultus II – maturus I (30–50). Grave goods: amphora, beaker with a handle, stone battle axe, stone flat axe, chipped industry – blade and flake. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (132). Pandora No.: CAH008. NM Prague Inv. No.: P7A 38582.

Grave 46. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: three amphorae/jugs/pots, beaker, cylindrical beaker, chipped industry – two blades. Archaeological dating: Corded Ware culture, middle/late stage. Radiocarbon dating: not available (132). Pandora No.: CAH009. NM Prague Inv. No.: P7A 38590.

Grave 47. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: amphora, jug, pot, single-handled cup, copper spiral temple ring. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-41378 ( $3853 \pm 27$ ) 2457–2209 cal BC 2-sigma (132). Pandora No.: CAH010. NM Prague Inv. No.: P7A 38591.

Grave 92. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adult (over 30). Grave goods: amphora, two jugs, pot + more fragments of more vessels, blade from stone flat axe (?). Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (132). Pandora No.: CAH011. NM Prague Inv. No.: P7A 38556.

## 7. Droužkovice (Droužkovice, Chomutov district, NW Bohemia, Czech Republic)

Contact person: Miroslav Dobeš

Rescue excavation above the seams of an underground brown coal mine (Z. Smrž) in 1982–1986. Three aceramic graves of the Corded Ware culture were found here, next to the multicultural prehistoric settlement remains (Funnel Beaker culture, Bell Beaker culture, Bronze Age, Early La Tène period). The graves contained either no finds or chipped industry only. Due to the state of bone preservation, only the following grave was analysed for the aDNA. The graves were published in full in (133).

Grave 20/B2. Skeleton: right-sided crouched burial, head towards the west-north-west. Sex: archaeology – M, anthropology – ?, aDNA – M. Age: juvenis – adultus I (17–25). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-45783 ( $4147 \pm 23$ ) 2872–2633 cal BC 2-sigma (133). Pandora No.: DRO001. NM Prague.

#### 8. Holubice (Holubice, Prague-West district, central Bohemia, Czech Republic)

*Contact person: Miroslav Dobeš, Josef Hložek, Erika Průchová*

Rescue excavation on the construction of roadways and utility lines for a new residential zone in 2008 (J. Hložek). Within an area of roughly 0.1 ha, a multicultural site was uncovered, in which an inhumation grave of the Únětice culture, eight cremation graves and one inhumation burial from the Late to Final Bronze Ages, two iron furnaces and other pits from the Roman Iron Age and the inhumation graves of the Funnel Beaker and Baden cultures (described below) were found. The Baden culture inhumation grave is among the first of its kind in Bohemia. The graves were published in full in (134).

Grave 21. Skeleton: right-sided crouched burial, head towards the south-east. Sex: archaeology – ?, anthropology – F ?, aDNA – F. Age: adultus II (30–40). Grave goods: beaker. Archaeological dating: Funnel Beaker culture, Baalberge/Siřem stage. Radiocarbon dating: CRL-15611 ( $4879 \pm 36$ ) 3760–3539 cal BC 2-sigma (134). Pandora No.: HOL001. M Roztoky.

Grave 24. Grave with two burials.

Skeleton 1 (A): left-sided crouched burial, head towards the east-north-east. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: maturus I (40–50). Grave goods: two jugs, stone flat axe, drilled antler axe. Archaeological dating: Baden culture, classical stage. Radiocarbon dating: CRL-15612 ( $4486 \pm 36$ ) 3347–3031 cal BC 2-sigma (134). Pandora No.: HOL004. M Roztoky.

Skeleton 2 (B): left-sided crouched burial, head towards the east-north-east. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: adultus II – maturus (30–55). Grave goods: see skeleton 1. Archaeological dating: Baden culture, classical stage. Radiocarbon dating: not available (134). Pandora No.: HOL002. M Roztoky.

#### 9. Hostivice (Hostivice, Prague-West district, central Bohemia, Czech Republic)

*Contact persons: David Daněček, Jana Klementová, Miluše Dobisíková*

Rescue excavation by J. Klementová and D. Daněček (Museum Roztoky) in 2007-2008. The excavated area covers 10 ha, more than 1,300 settlement pit features and a similar number of post holes have been found. The site was occupied during the Linear and Stroked Pottery cultures, the Funnel Beaker and Řivnáč

cultures, Hallstatt (Ha C-D1), Roman Iron Age and Early Middle Ages. More than 33 graves were also uncovered and burials were identified in sunken settlement features from the Funnel Beaker (Baalberge stage), Corded Ware, Bell Beaker and Knovíz cultures (B D – Ha A2), as well as from the La Tène period (Lt B1-C). A short report was published in (135). Anthropological research was performed by M. Dobisíková (National Museum). Four skeletons from eight graves belonging to the Bell Beaker culture (features 688, 689, 690 and 691) were sampled for aDNA.

Grave 17 (Feature 688). Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: adultus II – matus I (35–50). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30798 ( $3837 \pm 24$ ) 2455–2202 cal BC 2-sigma. (Not published). Pandora No.: HOP001A, B. NM Prague Inv. No.: P7A 18906.

Grave 19 (Feature 689). Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: adultus II – matus I (35–50). Grave goods: three cups, bowl, pot. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30799 ( $3795 \pm 25$ ) 2294–2141 cal BC 2-sigma. (Not published). Pandora No.: HOP002A, B. NM Prague Inv. No.: P7A 18907.

Grave 20 (Feature 690). Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: matus II (50–60). Grave goods: no finds. Archaeological dating: Bell Beaker culture, late stage (?). Radiocarbon dating: not available. (Not published). Pandora No.: HOP003A, B, C. NM Prague Inv. No.: P7A 18908.

Grave 22 (Feature 691). Skeleton: left-sided (!) crouched burial, head towards the south. Sex: archaeology – atypical, anthropology – F, aDNA – F. Age: matus (40–60). Grave goods: no finds. Archaeological dating: Bell Beaker culture, late stage (?). Radiocarbon dating: MAMS-38921 ( $3826 \pm 27$ ) 2450–2150 cal BC 2-sigma. (Not published). Pandora No.: HOP004A, B, C. NM Prague Inv. No.: P7A 18909.

## 10. Chleby (Nymburk district, central Bohemia, Czech Republic)

Contact person: Petr Krištuf, Ondřej Švejcar, Erika Průchová, Michal Ernéé

In 2016, a grave with a single burial (no. 2035) and a collective inhumation grave (no. 2036) from the early stage of the Únětice culture were uncovered during the excavation by the University of West Bohemia in Pilsen. Collective grave no. 2036 contained skeletal remains of at least 15 more or less complete individuals.

Grave/Skeleton 2035. Skeleton: partly disturbed, Sex: anthropology – child, aDNA – M. Age: infans (3–5). Grave goods: two vessels. Radiocarbon dating: not available. Pandora No.: CHL008.A, B.

Únětice collective grave, feature no. 2036

Skeletons: Collective grave no. 2036 contained more or less complete skeletal remnants of at least 15 individuals. Three skeletons were found in an anatomically correct position (2038, 2039 and 2077), three skeletons were partly disturbed and without skulls (2079-1, 2079-2 and 2080). There were also four separately deposited skulls (2041, 2075, 2076 and 2078) and a disarticulated deposition of human bones from other skeletons mixed with animal bones (2040). Grave goods: Five vessels, animal bones. Archaeological dating: stage 2–3 (early and middle stages) of the Únětice culture after Moucha (112).

Skeleton 2038. Skeleton: anatomically correct position, almost completely preserved. Sex: anthropology – M, aDNA – M. Age: adultus I (22–24). Radiocarbon dating: MAMS-40617 ( $3623 \pm 28$ ) 2116–1900 cal BC 2-sigma. Pandora No.: CHL003.

Skeleton 2039. Skeleton: anatomically correct position, almost completely preserved, Sex: anthropology – M, aDNA – M. Age: adultus I (20–30 /22–24/). Radiocarbon dating: not available. Pandora No.: CHL002.

Skeleton (skull) 2040/1. Skeleton: disarticulated, about 40% preserved, Sex: anthropology – M, aDNA – F. Age: adultus I (20–30). Radiocarbon dating: not available. Pandora No.: CHL001.

Skeleton (skull) 2041. Skeleton: only skull without mandibula, Sex: anthropology – F, aDNA – F. Age: maturus I (40–50). Radiocarbon dating: not available. Pandora No.: CHL007.

Skeleton (skull) 2075. Skeleton: only skull without mandibula, Sex: anthropology – M, aDNA – no aDNA. Age: adultus I-II (24–35). Radiocarbon dating: not available. Pandora No.: CHL004.

Skeleton (skull) 2076. Skeleton: only skull without mandibula, Sex: anthropology – F, aDNA – M. Age: senilis (over 55). Radiocarbon dating: not available. Pandora No.: CHL005.

Skeleton (skull) 2078. Skeleton: isolated skull, Sex: anthropology – child, aDNA – F. Age: infans (5–9). Radiocarbon dating: MAMS-40618 ( $3591 \pm 28$ ) 2024–1887 cal BC 2-sigma. Pandora No.: CHL006.

## 11. Kněževes 1 (Prague-West district, central Bohemia, Czech Republic)

*Published in (4, 5)*

Rescue excavation before the construction of a family home (O. Kytlcová, AI Prague) in 1953–1954. Within an area of ca. 100 m<sup>2</sup>, 12 inhumation and two bi-ritual Bell Beaker graves from the late stage of this culture were uncovered. The graves were published in full in (136) and (137). Two of them were sampled for aDNA (4, 5) and Sr (138).

Grave 14. Skeleton: left sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans. Grave goods: bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: Poz-84460 ( $3740 \pm 35$  BP) 2279–2033 cal BC 2-sigma (4, 5, 136, 137). Referred to in (5) as I5024. Master ID and/or other aDNA signs: I4145, RISE566, F0521. NM Prague Inv. No.: P7A 31168.

Grave 8. Skeleton: left sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – F. Age: juvenis (17–19). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (4, 5, 136, 137). Referred to in (5) as I5025. Master ID and/or other aDNA signs: I4136, RISE567, F0523 NM. Prague Inv. No.: P7A 30766.

## 12. Kněževes 2 (Prague-West district, central Bohemia, Czech Republic)

*Contact persons: Lubor Smejtek, Michal Ernée*

Rescue excavation by L. Smejtek (Archaia Prague) in 1998. Within an area of more than 10 ha, a total of 2,939 sunken settlement features were excavated, dating mostly (87.5%) to the Late and Final Bronze Ages. Completely published by L. Smejtek (139, 140). A total of 23 inhumation graves and some sunken settlement features from the early stage of the Early Bronze Age Únětice culture (140, 141) were recorded, too. A total of seven skeletons from five graves (features 2225, 2229, 2234, 2351 and 2767) were sampled for aDNA.

Grave 2225. Grave pit with two skeletons: A (above) and B (below, matus, 40–60). Fragments of a willow-leaf-type earring made of bronze/copper were found near the skull of individual A. Six vessels belonged probably to the skeleton B. Archaeological dating: early stage of the Únětice culture (Early Únětice stage after the periodisation of V. Moucha).

Skeleton A. Skeleton: preserved only some skull bones, some teeth and bones of one hand; original position of the skeleton unknown, head towards the south-south-east. Sex: anthropology – ?, aDNA – F. Age: matus I (40–50). Grave goods: fragments of a copper/bronze earring of the willow-leaf-type. Radiocarbon dating: MAMS-30771 ( $3705 \pm 24$ ) 2195–2028 cal BC 2-sigma (140, 141). Pandora No.: KNE002. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

Grave 2229. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F?, aDNA – F. Age: juvenis (13–20). Grave goods: two vessels and one pin made of bone. Archaeological dating: early stage of the Únětice culture (Early Únětice stage after periodisation of V. Moucha). Radiocarbon dating: MAMS-30772 ( $3648 \pm 19$ ) 2126–1949 cal BC 2-sigma (140, 141). Pandora No.: KNE003. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

Grave 2234. Archaeological dating: early stage of the Únětice culture (Early Únětice stage after V. Moucha).

Skeleton A. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: matus I (40–50). Grave goods: bronze earring, probably two vessels (1–2). Radiocarbon dating: MAMS-30773 ( $3704 \pm 24$ ) 2195–2027 cal BC 2-sigma (140, 141). Pandora No.: KNE004. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

Skeleton B. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – ?, aDNA – F. Age: adultus I (20–30). Grave goods: three vessels (3–5). Radiocarbon dating: MAMS-38478 ( $3730 \pm 24$ ) 2201–2037 cal BC 2-sigma (140, 141). Pandora No.: KNE005. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

Skeleton C. Skeleton: preserved only small parts of skull and some teeth, perhaps manipulated. Sex: anthropology – ?, aDNA – F. Age: adultus II (30–40). Grave goods: no grave goods. Radiocarbon dating: not available (140, 141). Pandora No.: KNE006. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

Grave 2351. Skeleton: right-sided crouched burial, head towards the south-east. Sex: anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: two vessels, including typical jug of the Proto-Únětice culture (vessel 2). Archaeological dating: earliest stage of the Únětice culture (Proto-Únětice stage after periodisation of V. Moucha). Radiocarbon dating: Bln-5436 ( $3679 \pm 34$ ) 2193–1957 cal BC 2-sigma (140–142). Pandora No.: KNE001. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

Grave 2767. Skeleton: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: three vessels (two dishes). Archaeological dating: early stage of the Únětice culture (Middle Únětice stage after periodisation of V. Moucha). Radiocarbon dating: MAMS-30774 ( $3651 \pm 20$ ) 2129–1950 cal BC 2-sigma (140, 141). Pandora No.: KNE007. ÚAPPSČ – Institute of Archaeological Heritage of Central Bohemia.

### 13–16. Kolín, road bypass (Kolín, Kolín district, central Bohemia, Czech Republic)

Rescue excavation preceding the construction of the road bypass around the town in 2008–2010, directed by R. Šumberová and D. Malyková (Institute of Archaeology, Prague). The length of the excavated strip of land was about 8 km and an area of ca. 40 ha was completely uncovered. Excavated 7,000 features belong to most of the archaeological periods between the beginning of the Neolithic up to the Early Middle Ages. The excavation was divided into ten sections (Kolín I–X), treated as separate fieldwork events with their own context numbers. Finds have been published selectively so far, for information see (143, 144).

#### 13. Kolín, road bypass, site I

Excavation by R. Šumberová in 2008–2010. Remains of a multicultural site with many settlement components (Neolithic, Funnel Beaker, Baden, Řivnáč, Globular Amphora, Únětice cultures, Middle Bronze Age, Hallstatt period) and burial areas (Únětice and Corded Ware cultures, Early Middle Ages) were uncovered.

##### 13.1. Kolín, road bypass, site I-3

*Published in (62)*

The grave under study was discovered in the fill of the ditch of the Late Neolithic rondel 2, at the depth of 120 cm below the surrounding subsoil surface level. The analysis of the field situation indicates that the burial was laid down into an partially filled rondel ditch, still well visible from the landscape surface even several centuries after its abandonment.

Grave 265. Skeleton: right-sided, subtly crouched burial, partially on the back, head towards the south. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: adultus I (20–25). Grave goods: beaker, bowl. Archaeological dating: Stroked Pottery culture. Radiocarbon dating: UGAMS-9614 ( $5710 \pm 25$  BP) 4650–4460 cal BC 2-sigma (62, 145). Master ID and/or other aDNA signs: kol002. Institute of Archaeology in Prague, Kutná Hora Branch.

##### 13.2. Kolín, road bypass, site I-7a

*Published in (62)*

The grave described below was uncovered in a shallow ‘building’ pit alongside a Linear Pottery culture house. Most probably it represents a secondary intervention into an earlier feature.

Grave 5160. Skeleton: semi-flexed left-sided position, oriented north-south with the face turned towards the east. The burial pit was so small and constricted that the woman's trunk – supported by the sloping pit wall – gave the impression of an almost sitting skeleton. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: adultus I (20–25). Grave goods (?): small sharp point made of bone. Archaeological dating: Stroked Pottery culture. Radiocarbon dating: UGAMS-9615 ( $5950 \pm 25$  BP) 4910–4740 cal BC 2-sigma (62, 144). Master ID and/or other aDNA signs: kol006. Institute of Archaeology in Prague, Kutná Hora Branch.

### 13.3. Kolín, road bypass, site I-7b

Contact persons: Radka Šumberová, Hana Brzobohatá, Miroslav Dobeš, Michal Ernée

The aDNA analyses were performed on two inhumation burials in the fill of the a semi-sunken Řivnáč culture hut (feature 3790), one inhumation burial of the Corded Ware culture (feature 3013), three burials from the Únětice culture settlement pit (feature 3037, group A; two individuals from other settlement pits were not analysed) and, selectively, skeletons from the Únětice culture cemetery (a total of 67 graves with 75 individuals, from which six graves with seven skeletons have been selected – see below for details, group B). With the exception of the Řivnáč culture feature 3790 (146, 147), these finds have not been published yet (for preliminary information see (143, 144)).

Feature No. 3790. Two irregular inhumation burials in a semi-sunken hut.

Skeleton 1. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: adultus II – maturus I (30–50). With the exception of fragments of a jug (?), no finds can be directly connected with the skeleton (only settlement discard from the fill of the feature). Archaeological dating: Řivnáč culture. Radiocarbon dating: MAMS-30781 ( $4216 \pm 24$ ) 2898–2700 cal BC 2-sigma (146, 147). Pandora No.: KO1001A, B. Institute of Archaeology in Prague, Kutná Hora Branch.

Skeleton 2. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (2–3). No connectable goods, only settlement discard from the fill of the feature. Archaeological dating: Řivnáč culture. Radiocarbon dating: not available (146, 147). Pandora No.: KO1016. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 3013. Skeleton: right-sided crouched burial, head towards the west-south-west. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: adultus – maturus I (25–50). Grave goods: flat stone axe. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-38481 ( $4055 \pm 29$ ) 2835–2485 cal BC 2-sigma. (Not published). Pandora No.: KO1002A. Institute of Archaeology in Prague, Kutná Hora Branch.

#### Group A

Settlement pit, feature No. 3037. The settlement pit (round, diameter 235 cm, depth 30 cm) has been used for burying of three individuals, one adult male and two children. The skeletons were partly covered with fragments of vessels and grinding stones under a layer with a large amount of potsherds, stones and daub. One vessel was found under the skeletons in the middle of the pit.

Skeleton I: buried in prone position. Sex: anthropology – child, aDNA – F. Age: infans (5–7). Grave goods: no personal grave goods. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UGAMS-

9623 (3570±25) 2017–1784 cal BC 2-sigma. Pandora No.: KO1006. Institute of Archaeology in Prague, Kutná Hora Branch.

Skeleton II: buried in supine position. Sex: anthropology – child, aDNA – M. Age: infans (8–10). Grave goods: no personal grave goods. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30785 (3460±25) 1879–1694 cal BC 2-sigma. Pandora No.: KO1007. Institute of Archaeology in Prague, Kutná Hora Branch.

Skeleton III: right-sided crouched burial, head towards the south. Sex: anthropology – M, aDNA – M. Age: adultus (20–40). Grave goods: no personal grave goods. Archaeological dating: Classic Únětice culture. Radiocarbon dating: not available. Pandora No.: KO1008. Institute of Archaeology in Prague, Kutná Hora Branch.

#### Group B

Grave 3540. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: maturus (40–60). Grave goods: two small vessels, one bronze earring, scapula. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UGAMS-9621 (3570±25) 2017–1784 cal BC 2-sigma; MAMS-30786 (3589±24) 2021–1888 cal BC 2-sigma. Pandora No.: KO1009. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 3690. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: adultus I (20–25). Grave goods: one small vessel, bronze pin of the Únětice type, two bronze beads, amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30787 (3599±24) 2022–1895 cal BC 2-sigma; CRL-19323 (3556±26) 2009–1777 cal BC 2-sigma. Pandora No.: KO1010. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 3829. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – no aDNA. Age: juvenis (16–18). Grave goods: bronze arm-ring, bone tools, and amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30788 (3503±25) 1894–1749 cal BC 2-sigma. Pandora No.: KO1012. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 4316. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: maturus (40–60). Grave goods: three vessels. Archaeological dating: early stage of the Únětice culture (Middle or Pre-Classic Únětice stage after V. Moucha). Radiocarbon dating: UGAMS-9622 (3660±25) 2135–1952 cal BC 2-sigma. Pandora No.: KO1011. Institute of Archaeology in Prague, Kutná Hora Branch.

#### Grave 4332

Skeleton I: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: maturus (40–60). Grave goods: three vessels, bronze pin of the Cypriot type, three bronze earrings, three bronze tubular spirals, hook with bone discs (float?), animal bone (scapula). Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30789 (3605±24) 2025–1899 cal BC 2-sigma (human bone); CRL-19325 (3528±28) 1939–1766 cal BC 2-sigma (animal scapula). Pandora No.: KO1013. Institute of Archaeology in Prague, Kutná Hora Branch.

Skeleton II: child's bones by the woman's leg. Sex: anthropology – child, aDNA – M. Age: infans (8–11). Grave goods: Archaeological dating: Classic Únětice culture. Radiocarbon dating: not available. Pandora No.: KO1014. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 4347. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: adultus II – matus I (30–50). Grave goods: two small vessels, bronze pin, bronze earring. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30790 (3509±24) 1900–1752 cal BC 2-sigma. Pandora No.: KO1015. Institute of Archaeology in Prague, Kutná Hora Branch.

#### 14. Kolín, road bypass, site II

*Contact person: Radka Šumberová, Hana Brzobohatá*

Excavation of R. Šumberová in 2008. A multicultural site, settlement components prevailing (Neolithic, Funnel Beaker, Řivnáč/Bošáca and Únětice cultures, Middle Bronze Age up to the La Tène period); a small number of graves (four Bell Beaker culture graves, one La Tène period grave). Three Bell Beaker (late stage) inhumation graves described below have been chosen for the aDNA analysis. All three were published in full (148).

Grave 4071. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – matus I (30–50). Grave goods: cup, bowl, chipped industry – two arrowheads and dagger (?). Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30782 (3783±25) 2287–2140 cal BC 2-sigma (148). Pandora No.: KO1003A, B, C. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 4073. Skeleton: left-sided crouched burial, head towards the north-east-north. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: juvenis – adultus I (18–22). Grave goods: cup, handled pot, bone artefact – finger ring. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30783 (3787±24) 2288–2141 cal BC 2-sigma (148). Pandora No.: KO1004A, B. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 4104. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: two cups, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30784 (3892±24) 2464–2299 cal BC 2-sigma (148). Pandora No.: KO1005A, Institute of Archaeology in Prague, Kutná Hora Branch.

#### 15. Kolín, road bypass, Site VI – Polepy

*Contact persons: Radka Šumberová, Hana Brzobohatá*

Rescue excavation of R. Šumberová due to the construction of the Kolín road bypass in 2009, section VI (cadastre area Polepy). A multicultural site with prevailing settlement components (Řivnáč, Bell Beaker and Únětice cultures, Hallstatt period) and a small group of graves (eight Bell Beaker graves). Three Bell Beaker culture (late stage) inhumation graves described below were chosen for aDNA analysis. Publication of the finds is being prepared.

Grave 4986. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (6–10). Grave goods: handled pot. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available. (Not published). Pandora No.: KOP001A, B. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 4989. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (8–12). Grave goods: cup, bowl, animal bones. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available. (Not published). Pandora No.: KOP002A, B, C, D. Institute of Archaeology in Prague, Kutná Hora Branch.

Grave 5216. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – ?, aDNA – M. Age: juvenis (14–18). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30791 (3907±24) 2470–2306 cal BC 2-sigma. (Not published). Pandora No.: KOP003A, B. Institute of Archaeology in Prague, Kutná Hora Branch.

#### 16. Kolín, road bypass, Site VII

*Contact person: Drahomíra Malyková, Hana Brzobohatá*

During the rescue excavation of the road bypass in 2009 (D. Malyková), a small cemetery of the early Únětice culture with nine graves was documented. Three skeletons were sampled for aDNA.

Grave 1409. Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – ?, aDNA – M. Age: adultus II – maturus I (30–50). Grave goods: one vessel, bone awl, chipped industry. Archaeological dating: early Únětice culture. Radiocarbon dating: MAMS-30792 (3655±24) 2133–1949 cal BC 2-sigma. Pandora No.: KO7001. Institute of Archaeology in Prague.

Grave 1412. Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – F?, aDNA – F. Age: adultus II – maturus II (30–60). Grave goods: two vessels. Archaeological dating: early Únětice culture. Radiocarbon dating: not available. Pandora No.: KO7002. Institute of Archaeology in Prague.

Grave 1418. Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – M, aDNA – M. Age: maturus (40–60). Grave goods: two vessels. Archaeological dating: early Únětice culture. Radiocarbon dating: MAMS-30793 (3761±24) 2281–2050 cal BC 2-sigma. Pandora No.: KO7003. Institute of Archaeology in Prague.

#### 17. Kolín-Štáralka (Kolín, Kolín district, central Bohemia, Czech Republic)

*Contact persons: Miroslav Dobeš, Miloš Vávra*

Rescue excavation due to the construction of an industrial hall in 2008 (M. Vávra, IAHCB). On an area of 0,15 ha, a settlement site from the Neolithic and Early Bronze Age was uncovered, burial activities being represented by 14 inhumation graves from the Baalberge stage of the Funnel Beaker culture and one Corded Ware grave. Samples for aDNA analysis were taken from Funnel Beaker culture skeletons, in cases the preservation state allowed it (a total of 7 graves). Roughly 40% of the graves were furnished with pottery,

while the others contained no finds: this means that their cultural affiliation can be deduced only from the form of the burial ritual. Given the condition of the bones, the cemetery was analysed only selectively; the results were published in full in (149, 150).

Grave 56/H1. Skeleton: left-sided crouched burial, head towards the north-west. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: juvenis – adultus I (18–24). Grave goods: fragments of one vessel. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: not available (149, 150). Pandora No.: KOB001. Institute of Archaeological Heritage of Central Bohemia.

Grave 57/H2. Skeleton: left-sided crouched burial, head towards the west-north-west. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: maturus (45–55). Grave goods: beaker, jug, bowl, another vessel. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: MAMS-45784 (4905±25) 3747–3642 cal BC 2-sigma (149, 150). Pandora No.: KOB002. Institute of Archaeological Heritage of Central Bohemia.

Grave 66/H5. Skeleton: left-sided crouched burial, head towards the west-north-west. Sex: archaeology – ?, anthropology – F, aDNA – M. Age: juvenis (14–16). Grave goods: no finds. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: not available (149, 150). Pandora No.: KOB003. Institute of Archaeological Heritage of Central Bohemia.

Grave 68/H6. Skeleton: left-sided crouched burial, head towards the north-west. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: juvenis (14–18). Grave goods: fragments of jug, fragments other vessel. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: not available (149, 150). Pandora No.: KOB004. Institute of Archaeological Heritage of Central Bohemia.

Grave 72/H10. Skeleton: left-sided crouched burial, head towards the west-north-west. Sex: archaeology – ?, anthropology – M, aDNA – F. Age: juvenis (14–16). Grave goods: no finds. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: MAMS-45785 (4986±24) 3906–3701 cal BC 2-sigma (149, 150). Pandora No.: KOB005. Institute of Archaeological Heritage of Central Bohemia.

Grave 75/H13. Skeleton: left-sided crouched burial, head towards the west-north-west. Sex: archaeology – ?, anthropology – ?, aDNA – no aDNA. Age: maturus (45–55). Grave goods: fragments of one vessel. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: not available (149, 150). Pandora No.: KOB006. Institute of Archaeological Heritage of Central Bohemia.

Grave 77/H14. Skeleton: left-sided crouched burial, head towards the north-west. Sex: archaeology – ?, anthropology – M, aDNA – M. Age: maturus (45–55). Grave goods: jug, two bowls, fragments of another vessel. Archaeological dating: Funnel Beaker culture, Baalberge stage. Radiocarbon dating: MAMS-45786 (4908±25) 3756–3643 cal BC 2-sigma (149, 150). Pandora No.: KOB007. Institute of Archaeological Heritage of Central Bohemia.

## 18. Konobrže (Konobrže, Most district, NW Bohemia, Czech Republic)

Contact person: Miroslav Dobeš

Rescue excavation in the forefront of an open-cast coal mine (P. Čech, M. Dobeš, D. Koutecký) in 1991–1994. The excavation area extended to ca. 1 ha. Settlement finds belonged to the Řivnáč, Knovíz and

Hallstatt cultures/periods, burial monuments were represented by an Únětice culture cemetery and 11 Corded Ware graves (early and later periods). In addition to pottery, the graves were furnished with chipped industry and bone and copper artefacts, including an antler belt clasp (see below). The Corded Ware culture cemetery was published in full in (151, 152); the analysis for the aDNA was selective.

Grave 10A/91. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: adultus (20–40). Grave goods: beaker, chipped industry – blade. Archaeological dating: Corded Ware culture, early stage. Radiocarbon dating: MAMS-45787 ( $4147 \pm 24$ ) 2872–2632 cal BC 2-sigma (151). Pandora No.: KON001. NM Prague.

Grave 26/91. Skeleton: left-sided crouched burial, head towards the east. Stratigraphically above grave 26A/91. Sex: archaeology – F, anthropology – F?, aDNA – no aDNA. Age: adultus II (30–40). Grave goods: amphora, pot, jug, cup, copper spiral temple ring. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (151). Pandora No.: KON002. NM Prague.

Grave 26A/91. Skeleton: right-sided crouched burial, head towards the west. Stratigraphically beneath grave 26/91. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (around 2). Grave goods: drilled animal tooth, chipped industry – flake. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (151). Pandora No.: KON003. NM Prague.

Grave 31/91. Skeleton: left-sided crouched burial, head towards the south-east. In the grave together with the skeleton of a newborn. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: amphora, jar, 370 animal teeth and their imitations, 43 bone beads, about one thousand shell beads, bone awl, animal bones (pig), chipped industry – blade. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-45788 ( $3947 \pm 24$ ) 2564–2347 cal BC 2-sigma (151). Pandora No.: KON004. NM Prague.

Grave 26/94. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – maturus I (30–50). Grave goods: two bone belt clasps, chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-45789 ( $4130 \pm 24$ ) 2868–2586 cal BC 2-sigma (152). Pandora No.: KON005. NM Prague Inv. No.: P7A 39467.

## 19. Lochenice (Lochenice, Hradec Králové district, east Bohemia, Czech Republic)

*Published in (5)*

The site was excavated in two phases: in 1953–1954 (J. Tomský, Museum Hradec Králové) and in 1976–1983 (J. Zeman, Institute of Archaeology, Prague, in cooperation with M. Buchvaldek and J. Sláma, Charles University). A Neolithic rondel and graves from the Lusatian Urnfield culture, Migration Period and Middle Ages have been discovered, as well as a bi-ritual Bell Beaker culture cemetery with 23 graves (153). Human remains from only one grave (described below) have been subjected to aDNA analysis to date.

Grave 1/82 (Buchv 20). Skeleton: heavily disturbed, grave pit was imperceptible. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (3–4). Grave goods: undecorated beaker (?), two cups, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 153). Master ID and/or other aDNA signs: I5666, F0519. NM Prague Inv. No.: P7A 38408.

## 20. Lovosice (Litoměřice district, NW Bohemia, Czech Republic)

*Published in* (5)

Rescue excavation during the construction of the AOYAMA factory in the Lovosice industrial zone (M. Půlpán and V. Sušická, Institute of Archaeological Heritage Care, Most) in 2002. Besides a Řivnáč culture settlement, seven Corded Ware graves, 14 Iron Age graves and one (described below) Bell Beaker grave were investigated over an area of ca. 7 ha (unpublished to date).

Grave 4/2002. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: maturus I (40–50). Grave goods: decorated handled beaker. Archaeological dating: Bell Beaker culture, middle stage. Radiocarbon dating: not available (5). Master ID and/or other aDNA signs: I6476, RISE736. Institute of Archaeological Heritage of North-West Bohemia.

## 21. Makotřasy (Kladno district, central Bohemia, Czech Republic)

*Contact persons:* Miroslav Dobeš, Petr Velemínský.

The site was discovered and largely excavated in 1961, due to the construction of the highway to Slaný, small trenching followed in 1973–1991 (E. Pleslová-Štíková, Institute of Archaeology, Prague). Excavations and geophysical surveys identified a 9-ha square enclosure delimited by ditch II. This square enclosure was interpreted as a cult feature and dated to the Siřem stage of the Funnel Beaker culture. Documented inside and outside the enclosure were more than 150 settlement pits that were to have been dug shortly after the end of the enclosure's primary function (the settlement features again belong to the Siřem stage of the Funnel Beaker culture). The remains of ca. 50 human skeletons were found in ditch II and settlement features, twenty of which were subjected to aDNA analysis (listed below). Besides the dominant Funnel Beaker culture finds, occupation was also identified from the periods of the Jordanów, Řivnáč, Únětice (pit 143: Bln-3335,  $3560 \pm 60$  BP, 2119–1701 cal BC 2-sigma), Knovíz and La Tène cultures. Only the rescue excavation from 1961 (154) has been published in detail, while the others have been mentioned thus far only in the context of comprehensive articles (for the latest review, see (55).) P. Velemínský anthropologically evaluated the analysed skeletons using existing methods (for older assessments, see (155)).

Settlement pit 1/61 (burial 2, “east”). Skeleton: right-sided crouched burial, head towards the north-west. A second crouched burial was found in the pit (not analysed, inv. no. P7A 34203). Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: maturus – senilis (over 40). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: not available (154, 155). Master ID and/or other aDNA signs: I14175. NM Prague, Inv. No.: P7A 34204.

Settlement pit 20/61. Skeleton: right-sided crouched burial, head towards the north-west. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: adultus (25–35). Grave goods: probably a bowl behind the skull, the rest only settlement discard from the fill of feature. Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: PSUAMS-4231 ( $4990 \pm 25$ ) 3914–3702 cal BC 2-sigma (154, 155). Master ID and/or other aDNA signs: I17186, MKTY\_20. NM Prague, Inv. No.: P7A 34183.

Settlement pit 28/61. Skeletons: on the bottom of the feature, the remains of two disturbed (?) children's burials, one of which was analysed (burial 2, skull on the left temple facing possibly towards the east). Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (4–6). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Sirem stage. Radiocarbon dating: not available (*154, 155*). Master ID and/or other aDNA signs: I14174. NM Prague, Inv. No.: P7A 34185.

Settlement pit 35/61. Skeleton: skull without mandible, on the right temple facing north. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: infans – juvenis (12–16). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Sirem stage. Radiocarbon dating: not available (*154, 155*). Master ID and/or other aDNA signs: I14170. NM Prague, Inv. No.: P7A 34187.

Settlement pit 51/61. Skeleton: right-sided crouched burial, head towards the north. Human bones of an additional two individuals found in the fill of the feature. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (6–8). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Jordanów (?) culture. Radiocarbon dating (data from the animal bones acquired from the fill of the same feature are not consistent with the radiocarbon date from the human bones): PSUAMS-4404 ( $5260 \pm 20$ ) 4228–3988 cal BC 2-sigma (human bones); GrN-6928 ( $4550 \pm 110$ ) 3623–2926 cal BC 2-sigma (0–20 cm, animal bones); GrN-6929 ( $4715 \pm 60$ ) 3635–3371 cal BC 2-sigma (20–70 cm /bottom/, animal bones) (*154, 155*). Master ID and/or other aDNA signs: I7187, MKTY\_51. NM Prague, Inv. No.: P7A 34191.

Settlement pit 59/61. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (3–5). Grave goods: probably a small beaker in front of the skull, further only settlement discard from the fill of feature. Archaeological dating: Funnel Beaker culture, Sirem stage. Radiocarbon dating: not available (*154, 155*). Master ID and/or other aDNA signs: I14167. NM Prague, Inv. No.: P7A 34192.

Settlement pit 86b/61 (north). Skeleton: only skull without mandible. Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: adultus II – maturus (over 30). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Sirem stage. Radiocarbon dating: PSUAMS-4232 ( $4880 \pm 20$ ) 3696–3641 cal BC 2-sigma (*154, 155*). Master ID and/or other aDNA signs: I7188, MKTY\_86. NM Prague, Inv. No.: P7A 34194.

Settlement pit 96/61. The remains of four skeletons were found in the settlement pit. Burial No. 3 after (*154*) (inv. no. P7A 34195) was not analysed.

Skeleton 1 (burial 1): right-sided crouched burial, head towards the north. Found at the east end of the feature. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: juvenis (15–20). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Sirem stage. Radiocarbon dating: PSUAMS-3879 ( $4840 \pm 25$ ) 3694–3535 cal BC 2-sigma (*154, 155*). Master ID and/or other aDNA signs: I7192, MKTY\_96/3. NM Prague, Inv. No.: P7A 34197.

Skeleton 2-1 (burial 2): right-sided crouched burial, head towards the south-west. Found at the north-west end of the feature. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (6–8). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel

Beaker culture, Siřem stage. Radiocarbon dating: PSUAMS-4233 ( $4765 \pm 20$ ) 3636–3521 cal BC 2-sigma (*154, 155*). Master ID and/or other aDNA signs: I7189, MKTY\_96/1. NM Prague, Inv. No.: P7A 34196.

Skeleton 2-2 (in (*154*) without number): disturbed burial at the west end of the feature. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (2–3). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: PSUAMS-3997 ( $4945 \pm 25$ ) 3776–3657 cal BC 2-sigma (*154, 155*). Master ID and/or other aDNA signs: I7191, MKTY\_96/2. NM Prague, Inv. No.: P7A 34196.

Settlement pit 100/61 (burial “e”). Skeleton: right-sided crouched burial, head towards the south-west. The remains of a disturbed burial were also found in the settlement pit (inv. no. P7A 34199). Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: infans – juvenis (12–15). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: not available (*154, 155*). Master ID and/or other aDNA signs: I14176. NM Prague, Inv. No.: P7A 34200.

Settlement pit 115/61. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: adultus I (20–25). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: not available (*154, 155*). Master ID and/or other aDNA signs: I14168. NM Prague, Inv. No.: P7A 34201.

Settlement pit 120/61. Skeleton: left-sided, mildly-crouched burial, with trunk turned on stomach, head towards the west. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: maturus – senilis (40+). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: PSUAMS-4234 ( $4890 \pm 25$ ) 3706–3641 cal BC 2-sigma (*154, 155*). Master ID and/or other aDNA signs: I7193, MKTY\_120. NM Prague, Inv. No.: P7A 34202.

Grave 124/75. Skeleton: right-sided crouched burial, head towards the south. Based on stratigraphy, probably Funnel Beaker culture. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (11–13). Without directly related goods. Archaeological dating: Funnel Beaker culture, Siřem stage? Radiocarbon dating: not available. (Not published, find report 3341/77). Master ID and/or other aDNA signs: I14171. NM Prague, Inv. No.: P7A 37239.

Test pit 19, feature 125/79. Skeleton: right-sided crouched burial, head towards the west. In the fill of ditch II, at a depth of 70–85 cm. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (8–10). Without directly related goods (only settlement discard from the fill of the ditch). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: not available. (Not published, find report 5312/81). Master ID and/or other aDNA signs: I14169. NM Prague, Inv. No.: P7A 38053.

Settlement pit 127/80. Skeleton: right-sided crouched burial covered with daub and stones, head towards the north-west. Found beneath the level of a feature interpreted as a furnace. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (2–4). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Funnel Beaker culture, Siřem stage. Radiocarbon dating: not available. (Not published, find report 5051/82). Master ID and/or other aDNA signs: I14172. NM Prague, Inv. No.: P7A 38218.

Test pit 27/81. Remains of at least seven individuals found on the east side of ditch II, at one of the entrances to the square enclosure. The skeletal remains rested at least partially in anatomical contexts on the bottom of the ditch, mostly in irreverential positions. A total of four burials were subjected to aDNA analysis. As such, the find situation supports a deposition of all individuals at the same time, most probably during a single burial event. The burials were not accompanied by goods, only settlement discard from the fill of the ditch.

Skeleton 2-1: The skull and upper limbs of a partially dislocated burial set in a north-south direction, with the top of the skull to the north. The rest of the skeleton was missing. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (4–5). Archaeological dating: Funnel Beaker culture, Sířem stage. Radiocarbon dating: PSUAMS-4235 ( $4770 \pm 20$ ) 3638–3522 cal BC 2-sigma. (Not published, find reports 3730/83 and 2518/85). Master ID and/or other aDNA signs: I7194, MKTY\_2-1. NM Prague, Inv. No.: P7A 38346/b.

Skeleton 3: partially dislocated burial in the north-south direction, with the top of the skull to the north. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: adultus II – maturus I (30–50). Archaeological dating: Funnel Beaker culture, Sířem stage. Radiocarbon dating: not available. (Not published, find reports 3730/83 and 2518/85). Master ID and/or other aDNA signs: I14173. NM Prague, Inv. No.: P7A 38346/e.

Skeleton 4: heavily dislocated burial with the skull facing east. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: adultus II – maturus I (30–50). Archaeological dating: Funnel Beaker culture, Sířem stage. Radiocarbon dating: not available. (Not published, find reports 3730/83 and 2518/85). Master ID and/or other aDNA signs: I16121. NM Prague, Inv. No.: P7A 38346/d.

Skeleton 6: left-sided crouched burial, head towards the south-east, with trunk turned on stomach. Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: adultus II – maturus I (30–50). Archaeological dating: Funnel Beaker culture, Sířem stage. Radiocarbon dating: not available. (Not published, find reports 3730/83 and 2518/85). Master ID and/or other aDNA signs: I16122. NM Prague, Inv. No.: P7A 38346/f.

## 22. Mikulovice (Mikulovice, Pardubice district, east Bohemia, Czech Republic)

*Contact person: Michal Ernée*

Rescue excavation in 2006–2012 (J. Frolík, R. Sedláček). Altogether, thousands of sunken settlement features and about 100 Early Bronze Age graves were documented in several groupings. With the exception of two Proto-Únětice graves (No. 95 and 96), the graves mostly belong to the Classic and Post-Classic stages of the Únětice culture after Moucha (112). The inhumation burials are very rich in so-called “exotics”, especially amber artefacts, which are present in 27 graves. The EBA cemetery has been completely analysed and published (60).

Grave 1. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – child, aDNA – F. Age: infans (5–6). Grave goods: two vessels, bronze eyelet pin, amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: CRL-19406 ( $3575 \pm 22$ ) 2016–1880 cal BC 2-sigma (60). Pandora No.: MIB024. NM Prague Inv. No.: P7A 43100.

Grave 7. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: maturus I (35–50). Grave goods: three vessels, animal bone, shell. Archaeological dating: Classic

Únětice culture. Radiocarbon dating: CRL-19411 ( $3562\pm22$ ) 1976–1782 cal BC 2-sigma (60). Pandora No.: MIB028. NM Prague Inv. No.: P7A 43106.

Grave 17. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – juvenis, aDNA – F. Age: juvenis (14–16). Grave goods: one small vessel, two bronze pins, one of them an eyelet pin, two bronze earrings, two bronze ribbed bracelets, amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30461 ( $3416\pm25$ ) 1860–1640 cal BC 2-sigma (60). Pandora No.: MIB034. NM Prague Inv. No.: P7A 43116.

Grave 51. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – child, aDNA – M. Age: infans (4–5). Grave goods: one vessel, two bronze arm-rings, belt ornament made of amber beads and amber ring. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30481 ( $3516\pm20$ ) 1908–1766 cal BC 2-sigma (60). Pandora No.: MIB001. NM Prague Inv. No.: P7A 43179.

Grave 55. Skeleton: right-sided crouched burial, head towards the south-east. Sex: anthropology – F, aDNA – F. Age: adultus (20–25). Grave goods: two vessels, bronze eye-headed pin, two bronze earrings, necklace made of amber beads and bronze/copper spirals, awl made of animal bone. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30482 ( $3494\pm19$ ) 1883–1753 cal BC 2-sigma; CRL-19334 ( $3548\pm31$ ) 1973–1771 cal BC 2-sigma (60). Pandora No.: MIB002. NM Prague Inv. No.: P7A 43181.

Grave 62. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – M, aDNA – M. Age: adultus I (20–25). Grave goods: awl made of animal bone. Archaeological dating: Pre-Classic to Classic Únětice culture. Radiocarbon dating: MAMS-30484 ( $3503\pm18$ ) 1888–1759 cal BC 2-sigma (60). Pandora No.: MIB004. NM Prague Inv. No.: P7A 43186.

Grave 64. Skeleton 64a: right-sided crouched burial, head towards the south-east. Sex: anthropology – F, aDNA – F. Age: senilis (over 60). Grave goods: two vessels and animal bones. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30485 ( $3498\pm19$ ) 1879–1775 cal BC 2-sigma (60). Pandora No.: MIB005. NM Prague Inv. No.: P7A 43187.

Grave 68. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – juvenis, aDNA – F. Age: juvenis (15–16). Grave goods: two to three vessels, bronze pin, two bronze earrings, necklace made of bronze spirals. Archaeological dating: Classic Únětice culture. Radiocarbon dating: MAMS-30483 ( $3538\pm19$ ) 1937–1776 cal BC 2-sigma (60). Pandora No.: MIB003. NM Prague Inv. No.: P7A 43185.

#### Grave 92

Skeleton 92a: right-sided crouched burial, head towards the south. Sex: anthropology – child, aDNA – M. Age: infans (2.5–3.5). Grave goods: one vessel. Archaeological dating: Pre-Classic to Classic Únětice culture. Radiocarbon dating: MAMS-30493 ( $3601\pm19$ ) 2022–1900 cal BC 2-sigma (60). Pandora No.: MIS001. NM Prague Inv. No.: P7A 43201.

Skeleton 92b: right-sided crouched burial, head towards the south. Sex: anthropology – child, aDNA – M. Age: infans (6–8). Grave goods: one vessel. Archaeological dating: Pre-Classic to Classic Únětice culture. Radiocarbon dating: MAMS-30494 ( $3582\pm19$ ) 2012–1887 cal BC 2-sigma (60). Pandora No.: MIS002. NM Prague Inv. No.: P7A 43202.

Grave 93. Skeleton: right-sided crouched burial, head towards the south-east. Sex: anthropology – M, aDNA – M. Age: adultus II (20–35). Grave goods: animal bone. Archaeological dating: Classic Únětice culture. Radiocarbon dating: CRL-20110 (3550±23) 1955–1776 cal BC 2-sigma (60). Pandora No.: MIS004. NM Prague Inv. No.: P7A 43217.

Grave 96. Skeleton: right-sided crouched burial, head towards the south-east. Sex: anthropology – M, aDNA – M. Age: senilis (over 60). Grave goods: no grave goods. Archaeological dating: Proto-Únětice culture. Radiocarbon dating: CRL-20112 (3833±27) 2456–2199 cal BC 2-sigma (60). Pandora No.: MIS006. NM Prague Inv. No.: P7A 43176.

Settlement pit 2217. Skeleton 97c: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – F, aDNA – F. Age: maturus II – senilis (over 55). Grave goods: no grave goods. Archaeological dating: Classic Únětice culture. Radiocarbon dating: CRL-20113 (3659±23) 2134–1953 cal BC 2-sigma (60). Pandora No.: MIG010. NM Prague Inv. No.: P7A 43214.

Settlement pit 2412. Skeleton 98: right-sided crouched burial, head towards the south. Sex: anthropology – F?, aDNA – F. Age: adultus I (20–30). Grave goods: no grave goods. Archaeological dating: Classic to Post-Classic Únětice culture. Radiocarbon dating: CRL-20114 (3658±24) 2134–1951 cal BC 2-sigma (60). Pandora No.: MIG011. NM Prague Inv. No.: P7A 43203.

Settlement pit 3/08. Skeleton 99: left-sided crouched burial, head towards the north. Sex: anthropology – M, aDNA – M. Age: adultus II – matus I (30–50). Grave goods: no grave goods. Archaeological dating: Únětice culture. Radiocarbon dating: CRL-20115 (3533±32) 1947–1759 cal BC 2-sigma (60). Pandora No.: MIG012. NM Prague Inv. No.: P7A 43209.

## 23. Neratovice (Neratovice, Mělník district, central Bohemia, Czech Republic)

*Contact persons:* Miroslav Dobeš, Petr Velemínský

An inhumation grave discovered in a trench dug for a sewer line at the local chemical factory (V. Spurný, Institute of Archaeology, Prague) in 1962.

Grave 1. Skeleton: right-sided crouched burial, head towards the south-west-south. Sex: archaeology – ?, anthropology – M, aDNA – M. Age: adultus II – matus I (30–50). Grave goods: chipped industry – two blades. Archaeological dating: Jordanów culture. Radiocarbon dating: MAMS-45790 (5284±27) 4231–4000 cal BC 2-sigma. (Not published). Pandora No.: NER001. NM Prague Inv. No.: P7A 33838.

## 24. Obříství (Obříství, Mělník district, central Bohemia, Czech Republic)

*Contact persons:* Miroslav Dobeš, Monika Pecinovská, Petra Stránská

Rescue excavation during the construction of roadways and utility lines for a new residential zone in 2011 (M. Pecinovská, Institute of Archaeology, Prague). The excavation area extended to ca. 3 ha and contained hundreds of settlement features (Neolithic, Bell Beaker culture, Bronze Age, Hallstatt period, Roman Iron Age) and the Corded Ware inhumation graves described below. The graves were 50 m from each other (grave 1 to grave 372), or 150 m from each other (grave 1 to grave 166). The site is probably part of a larger

cemetery that has not yet been investigated. The described features remain unpublished; a preliminary report appears in (156).

Grave 1. Grave with two skeletons.

Skeleton 1 (K1): left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus II – matus I (35–50). Grave goods: two animal bone disks, bone awl/pin. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-30794 (4276±22) 2913–2882 cal BC 2-sigma (human bone); MAMS-41363 (4064±23) 2835–2492 cal BC 2-sigma (human bone); BRAMS-2959 (4016±26) 2617–2467 cal BC 2-sigma (animal bone disc 2). (Not published). Pandora No.: OBR001A, B. NM Prague Inv. No.: P7A 42983.

Skeleton 2 (K2). left(?)-sided crouched burial, head towards the east. Sex: archaeology – ?, anthropology – newborn, aDNA – F. Age: infans (newborn). Grave goods: without grave goods. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-38471 (3941±25) 2562–2345 cal BC 2-sigma (human bone); MAMS-41364 (3861±34) 2462–2209 cal BC 2-sigma (human bone). (Not published). Pandora No.: OBR002A. NM Prague Inv. No.: P7A 42984.

Grave 166. Skeleton: right-sided crouched burial, head towards the north-west. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: adultus II – matus I (35–50). Grave goods: pot, two bone belt clasps, stone battle axe (A-type), chipped industry – blade. Archaeological dating: Corded Ware culture, early stage. Radiocarbon dating: MAMS-30795 (4259±23) 2911–2875 cal BC 2-sigma. (Not published). Pandora No.: OBR003A. NM Prague Inv. No.: P7A 42985.

Grave 372. Skeleton: left-sided crouched burial, head towards the east-south-east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: senilis (over 60). Grave goods: amphora, beaker, jar. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-38483 (4048±26) 2832–2482 cal BC 2-sigma. (Not published). Pandora No.: OBR004A, B. NM Prague Inv. No.: P7A 42986.

## 25. Plotiště nad Labem (Plotiště nad Labem, Hradec Králové district, east Bohemia, Czech Republic)

Contact persons: *Miroslav Dobeš, Petra Stránská*

Large-scale research ('systematic') excavation by A. Rybová and V. Vokolek in 1961–1970. Its area, in front of a brickyard, covered ca. 1 ha. The site was multicultural, with the Stroked Pottery culture settlement and cemetery; Funnel Beaker, Bořáca, Únětice and Silesia-Platěnice culture settlement finds and a cremation cemetery from the Roman Iron Age). The lone Corded Ware culture grave, furnished with antler belt clasps (LX), was recently joined by another two graves (LIX and 221b) based on radiocarbon dating. These two graves had originally been regarded as Stroked Pottery graves (both inhumation graves without any additional finds). All have been published in detail; see (157–160).

Grave LX. Skeleton: right-sided crouched burial, head towards the north-west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus I (25–30). Grave goods: two bone belt clasps, bone awl, chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-41376 (4271±25) 2914–2879 cal BC 2-sigma (157, 158). Pandora No.: PNL001. NM Prague Inv. No.: P7A 36100.

Grave 221B. Skeleton: right-sided crouched burial, head towards the north-north-west. Sex: archaeology – M, anthropology – ?, aDNA – M. Age: juvenis (14–16). Grave goods: fragment of stone flat axe. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: Poz-86648 (4110±35), 2869–2573 cal BC 2 sigma (159, 161). Pandora No.: PNL002. NM Prague Inv. No.: P7A 43219.

## 26. Praha - Ďáblice (Ďáblice, Praha 8, central Bohemia, Czech Republic)

*Contact persons: Michal Kostka, Lubor Smejtek, Michal Ernée*

Excavated in 1993 during a rescue excavation (M. Kostka). A small cemetery from the early stage of the Únětice culture with 15 inhumation graves (14 in one group and one isolated grave). A total of 29 buried individuals were identified in the skeletal remains (7 men, 7 women, 9 children and 6 undeterminable). Multiple burials with two to five skeletons were also discovered. Ceramic vessels were mainly found as grave goods (one to five per grave). Two copper rings and some bone artefacts also sporadically occurred. The cemetery was completely analysed and published (162, 163).

Grave 22B. Skeleton: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: two vessels. Archaeological dating: early stage of the Únětice culture (Early Únětice stage after periodisation of V. Moucha). Radiocarbon dating: MAMS-30755 (3675±22) 2137–1978 cal BC 2-sigma (162, 163). Pandora No.: PDA001. City of Prague Museum.

Grave 22D. Inhumation grave containing one complete skeleton (1) and the anthropological remains of another four buried individuals (2–5). Archaeological dating: early stage of the Únětice culture (Early Únětice stage after periodisation of V. Moucha) (162, 163).

Skeleton 1. Skeleton: right-sided crouched burial, head towards the south-south-west. Sex: anthropology – M, aDNA – M. Age: adultus II (30–40). Grave goods: two vessels, ornamented bone disk, bone awl, copper/bronze earring. Radiocarbon dating: MAMS-30756 (3720±21) 2197–2036 cal BC 2-sigma; KI-4454 (3740±45) 2289–2025 cal BC 2-sigma (162, 163). Pandora No.: PDA002. City of Prague Museum.

Skeleton 2. Skeleton: isolated skull deposited by the southern part of the east side of the grave pit. Sex: anthropology – F, aDNA – F. Age: juvenis (15–20). Grave goods: no grave goods. Radiocarbon dating: MAMS-38479 (3765±24) 2284–2058 cal BC 2-sigma (162, 163). Pandora No.: PDA003. City of Prague Museum.

Skeleton 3. Skeleton: skull and crossed extremities deposited by the south side of the grave pit, over the skull of skeleton No. 1. Sex: anthropology – F, aDNA – F. Age: maturus I (40–50). Grave goods: no grave goods. Radiocarbon dating: MAMS-30757 (3717±20) 2196–2036 cal BC 2-sigma (162, 163). Pandora No.: PDA004. City of Prague Museum.

Skeleton 4. Skeleton: skull and some other bones deposited by the southern part of the west side of the grave pit. Sex: anthropology – M, aDNA – M. Age: maturus II (50–60). Grave goods: no grave goods. Radiocarbon dating: MAMS-38480 (3786±25) 2288–2141 cal BC 2-sigma (162, 163). Pandora No.: PDA005. City of Prague Museum.

## 27.1. Praha - Jinonice (Jinonice, Praha 5, central Bohemia, Czech Republic)

Contact persons: Miroslav Dobeš, Katarína Petriščáková

Rescue excavation due to the construction of the Nové Butovice metro station in 1983 (J. Havel, J. Kovářík). A multicultural site extending to ca. 2 ha. Among other finds (Stroked Pottery, Jordanów and Únětice culture graves), seven Corded Ware culture graves were investigated. Based on the finds, the graves can be attributed to a lesser extent to the middle (Group II) and mostly to the late stage of the Corded Ware culture (Group III after (164)). Given the poor condition of the bones, only one skeleton was subjected to aDNA analysis. The graves were comprehensively published in (165) (grave nos. 1–7).

Grave 3 (Buchv 3). Skeleton: left-sided crouched burial, head towards the east. In the grave together with a right (?)-side crouched burial, head towards the north-east (infans, 4–6). Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: cylindrical beaker, two amphorae, two jugs. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (165). Pandora No.: JIN001. NM Prague Inv. No.: P7A 39106.

## 27.2. Praha - Jinonice, Holman's garden centre (Jinonice, Praha 5, central Bohemia, Czech Republic)

Published in (5).

Rescue excavations during the construction of the Prague metro in 1984–1986. A cemetery of the early Únětice culture was discovered, with 29 graves and skeletal remains of 41 individuals (aDNA was analysed in eight cases; see below). However, the site was not excavated completely. Besides the numerically dominant Únětice culture component, a small number of graves from other periods were found: the Neolithic (three Stroked Pottery inhumation graves with five burials (166), see grave 70) and the Eneolithic (unpublished). Besides an evaluation of the relevant anthropological material (167), the Únětice culture finds have not been published in detail and are only mentioned in works (168). A monograph is being prepared (*K. Petriščáková*).

Grave 54. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – M?, aDNA – F. Age: maturus I (40–50). Grave goods: two jugs, small pot. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (5, 167). Master ID and/or other aDNA signs: I7195, PRAJIN54. NM Prague Inv. No.: P7A 16062.

Grave 59. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: adultus II – matus I (35–50). Grave goods: bronze hair ring, bone awl, chipped industry – blade. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (5, 167). Master ID and/or other aDNA signs: I7196, PRAJIN59. NM Prague Inv. No.: P7A 16066.

Grave 70 (?). Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – M?, aDNA – M. Age: adultus I (20–30). Grave goods: two cups, bowl. Archaeological dating: Stroked Pottery culture. Radiocarbon dating: PSUAMS-4344 (5660±25 BP) 4546–4451 cal BC 2-sigma (5, 166, 167). Master ID and/or other aDNA signs: I7197, PRAJIN77. NM Prague Inv. No.: P7A 16073.

Grave 82. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: adultus I (20–30). Grave goods: bowl. Archaeological dating: Únětice

culture, early stage. Radiocarbon dating: PSUAMS-3885 ( $3685 \pm 25$  BP) 2189–1978 cal BC 2-sigma (5, 167). Master ID and/or other aDNA signs: I7198, PRAJIN82. NM Prague Inv. No.: P7A 16075.

Grave 84. Grave with two burials.

Skeleton 1 (84-I): disturbed burial. Sex: archaeology – ?, anthropology – M?, aDNA – M. Age: adultus I (20–30). Grave goods: cup, jug, bowl, fragments of three other vessels. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: PSUAMS-3886 ( $3700 \pm 25$  BP) 2196–1985 cal BC 2-sigma (5, 167). Master ID and/or other aDNA signs: I7199, PRAJIN84 (1). NM Prague Inv. No.: P7A 16077.

Skeleton 2 (84-II): right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: maturus (40–60). Grave goods: see skeleton 1. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (5, 167). Master ID and/or other aDNA signs: I7200, PRAJIN84 (2). NM Prague Inv. No.: P7A 16078.

Grave 88. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: adultus II (30–40). Grave goods: two cups, bowl, fragments of two other vessels and bronze hair rings. This grave contained another inhumation burial (not analysed). Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (5, 167). Master ID and/or other aDNA signs: I7201, PRAJIN88. NM Prague Inv. No.: P7A 16085.

Grave 94. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: adultus I (20–30). Grave goods: cup, bowl, bronze hair rings, chipped industry – arrowhead. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (5, 167). Master ID and/or other aDNA signs: I7202, PRAJIN94. NM Prague Inv. No.: P7A 16091.

Grave 97. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: adultus I (20–30). Grave goods: cup, chipped industry. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (5, 167). Master ID and/or other aDNA signs: I7203, PRAJIN97. NM Prague Inv. No.: P7A 16094.

## 28. Praha - Jinonice, Butovická St. (Jinonice, Praha 5, central Bohemia, Czech Republic)

*Published in (5).*

A part of a Bell Beaker culture bi-ritual cemetery. In 2007, a section of the cemetery was investigated during the rescue excavation before the construction of a family house (trenches of the house) in Butovická St., Prague-Jinonice. Six of the seven excavated features were inhumations, the last one was a funerary feature interpreted as an incineration place. Based on the skeleton position, three of the buried individuals were male, two female and one indefinite. One of female burials (grave no. 4) was probably placed in a wooden chamber. Burial assemblages consisted mainly of undecorated pottery (1–3 vessels), accompanied in one case by a flint arrowhead, in another grave by 11 antler buttons (169).

Grave 1 (500/07). Skeleton: right-sided crouched burial, head towards the south-west. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus (25–35). Grave goods: two bowls. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2801 ( $3805 \pm 20$  BP) 2297–2147 cal BC 2-

sigma (5, 169). Master ID and/or other aDNA signs: I4946. City of Prague Museum, Inv. No.: A 380 082–100.

Grave 3 (502/07). Skeleton: left-sideed crouched burial, head towards the north. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (7). Grave goods: jar. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2852 ( $3750 \pm 20$  BP) 2273–2047 cal BC 2-sigma (5, 169). Master ID and/or other aDNA signs: I4895. City of Prague Museum, Inv. No.: A 380 103–113.

Grave 4 (504/07). Skeleton: heavily disturbed, likely right-sided crouched burial, head towards the south-east. Sex: archaeology – F?, anthropology – F?, aDNA – M. Age: maturus II (50–60). Grave goods: two jars, bowl, two large round decorated antler buttons, nine small V-shaped antler buttons, animal bones in and outside the bowls (*Sus scrofa* cf. *domestica*). Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 169). Master ID and/or other aDNA signs: I4947. City of Prague Museum, Inv. No.: A 380 151–276.

Grave 5 (505/07). Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – child, aDNA – F. Age: infans (around 6). Grave goods: jar, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2853 ( $3785 \pm 20$  BP) 2288–2142 cal BC 2-sigma (5, 169). Master ID and/or other aDNA signs: I4896. City of Prague Museum, Inv. No.: A 380 277–286.

Grave 6 (507/07). Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – F, aDNA – M. Age: adultus II (30–40). Grave goods: jar, chipped industry – arrowhead. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2864 ( $3780 \pm 20$  BP) 2286–2139 cal BC 2-sigma (5, 169). Master ID and/or other aDNA signs: I5514. City of Prague Museum, Inv. No.: A 380 290–309.

## 29. Praha - Kobylisy, Ke Stírce St. (Kobylisy, Praha 8, central Bohemia, Czech Republic)

*Published in (5).*

A part of a Bell Beaker culture bi-ritual cemetery excavated in 2005/2006 during the rescue excavation before construction work on residential houses in Ke Stírce St. in Prague-Kobylisy (for preliminary information, see (170)). Eleven excavated features were inhumations, the last one (grave no. 6) was a cremation grave, probably with the place of incineration. One of the inhumations is probably a secondary burial. Based on the skeleton position, six of the buried individuals were male, one female and five undefined. The female burial (grave no. 14) was probably placed in a wooden chamber. The burial assemblages consisted mainly of undecorated pottery (1–3 vessels) accompanied by three antler buttons and animal bones. Two graves (grave nos. 11 and 12) consisted completely archery equipment (arrowheads, wristguards and, in one case, an antler flint-knapping tool and probably bow-covering made of animal bones). Eight of the excavated skeletons (graves) were well-preserved and sampled for aDNA analysis (grave nos. 4, 8–14, see (5)). The cemetery is not yet published but is currently being prepared for publication. There were also two Stroked Pottery/Lengyel culture inhumation burials in a settlement pit (feature 552) and two Únětice culture skeletons in settlements pits (feature 515 and 541).

Grave 4 (528). Skeleton: left-sided crouched burial, heavily disturbed, head towards the north-east. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (5–6). Grave goods: jar, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2843 ( $3790\pm20$  BP) 2289–2143 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4885. City of Prague Museum, No.: A46/2005.

Grave 8 (541). Skeleton: left-sided crouched burial, well-preserved with animal disturbance, head towards the north-east. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (9–13). Grave goods: bowl with animal bones inside. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2844 ( $3740\pm20$  BP) 2205–2042 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4886. City of Prague Museum, No.: A46/2005.

Grave 9 (542). Skeleton: left-sided crouched burial, disturbance or secondary inhumation, head probably towards the north-east. A chop injury is visible on the head. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (7–8). Grave goods: bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2845 ( $3730\pm20$  BP) 2201–2039 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4887. City of Prague Museum, No.: A46/2005.

Grave 10 (543). Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (6–7). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2846 ( $3700\pm20$  BP) 2190–2029 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4888. City of Prague Museum, No.: A46/2005.

Grave 11 (544). Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus (40–60). Grave goods: chipped industry – three arrowheads, stone wristguard, antler flint-knapping tool, bow-covering made of animal bones. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2847 ( $3765\pm20$  BP) 2281–2062 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4889. City of Prague Museum, No.: A46/2005.

Grave 12 (545). Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus (40–60). Grave goods: two cups, bowl, chipped industry – five arrowheads, stone wristguard. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5). Master ID and/or other aDNA signs: I4890. City of Prague Museum, No.: A46/2005.

Grave 13 (546). Skeleton: extended position with crouched hands on the shoulders, head towards the north-east. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus (20–40). Grave goods: bowl, chipped industry – two arrowheads. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2848 ( $3765\pm20$  BP) 2281–2062 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4891. City of Prague Museum, No.: A46/2005.

Grave 14 (547). Skeleton: right-sided crouched burial, head towards the south-west, probably remnants of wooden chamber, bowl resting on stair. Sex: archaeology – F, anthropology – F, aDNA – F. Age: maturus (40–60). Grave goods: bowl, three small V-shaped antler buttons. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-2854 ( $3795\pm20$  BP) 2291–2144 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4945. City of Prague Museum, No.: A46/2005.

Settlement feature (pit) 515. Skeleton: right(?)-sided crouched burial, orientation (?). Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: ? Grave goods: without directly related goods (probably only settlement discard from the fill of feature). Archaeological dating: Únětice culture, classic stage. Radiocarbon dating: PSUAMS-2842 ( $3480 \pm 20$  BP) 1882–1745 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4884. City of Prague Museum, No.: A46/2005.

Settlement feature (pit) 551. Skeleton: right-sided crouched burial, orientation (?). Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: ? Grave goods: without directly related goods (probably only settlement discard from the fill of feature). Archaeological dating: Únětice culture, classic stage. Radiocarbon dating: PSUAMS-2849 ( $3475 \pm 20$  BP) 1881–1701 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4892. City of Prague Museum, No.: A46/2005.

Settlement feature (pit) 552 with two burials (17 and 18).

Skeleton 17: irregular inhumation burial, adult. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: ? Grave goods: with the exception of one amphora (?), without directly related goods (only settlement discard from the fill of feature). Archaeological dating: Stroked Pottery/Lengyel culture. Radiocarbon dating: PSUAMS-2850 ( $5550 \pm 20$  BP) 4449–4348 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4893. City of Prague Museum, No.: A46/2005.

Skeleton 18: only skull, child (?). Sex: archaeology – ?, anthropology – ?, aDNA – F. Age: ? Grave goods: see skeleton 17. Archaeological dating: Stroked Pottery/Lengyel culture. Radiocarbon dating: PSUAMS-2851 ( $5610 \pm 20$  BP) 4488–4368 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I4894. City of Prague Museum, No.: A46/2005.

### 30. Praha - Malá Ohrada (Stodůlky, Praha 5, central Bohemia, Czech Republic)

Rescue excavation due to the construction of the "Lužiny" prefab housing estate (J. Kovářík) in 1979–1980. Uncovered at the multicultural site with more than 500 features scattered over an area of ca. 1.5 ha was a great deal of evidence of settlement activities (Funnel Beaker culture, Late and Final Bronze Age, Hallstatt period, Roman Iron Age) and burials (Jordanów culture, Corded Ware culture, Bell Beaker culture, Únětice culture, Early Middle Ages), from which Corded Ware and Bellbeaker burials have been subjected to aDNA analysis thus far.

#### 30.1. Praha - Malá Ohrada (CW)

Contact persons: Miroslav Dobeš, Katarína Petriščáková, Petr Velemínský

Of four investigated Corded Ware culture graves (grave nos. 53–56), only two were analysed for aDNA due to the poor condition of the bones. These were comprehensively published in (165).

Grave 10 (Buchv 54). Skeleton: right-sided crouched burial, head towards the south-east. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – maturus I (30–50). Grave goods: amphora, beaker, beaker with the handle, stone flat axe, copper artefact – knife?, whetstone, chipped industry – blade and flake. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-44709 ( $3987 \pm 25$ ) 2571–2467 cal BC 2-sigma (165). Pandora No.: OHR001. NM Prague Inv. No.: P7A 38757.

Grave 26 (Buchv 55). Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: juvenis (14–15). Grave goods: two amphorae, beaker with handle, pot, copper spiral temple ring, two drilled shell discs, 275 drilled animal teeth and their imitations, 134 shell beads, 4 bone beads, chipped industry – blade and flakes. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-41374 ( $4017 \pm 25$ ) 2579–2472 cal BC 2-sigma (165). Pandora No.: OHR002. NM Prague Inv. No.: P7A 38771.

### 30.2. Praha - Malá Ohrada (BB)

*Published in (5).*

An isolated Bell Beaker inhumation grave was investigated at the site in 1979. The grave has not yet been published in detail.

Grave 2 (507/07). Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – F?, aDNA – F. Age: adultus II – maturus I (35–50). Grave goods: unornamented bell beaker. Archaeological dating: Bell Beaker culture, middle stage. Radiocarbon dating: PSUAMS-4350 ( $3810 \pm 20$  BP) 2334–2149 cal BC 2-sigma (5) Master ID and/or other aDNA signs: I7281, PRH5\_2. NM Prague Inv. No.: P7A 38749.

### 31. Praha - Miškovice (Miškovice, Praha 9, central Bohemia, Czech Republic)

*Contact person: Michal Ernée*

In 1999 and 2001, a part of the inhumation cemetery of the EBA Únětice culture was investigated during the rescue excavation before the construction of family houses. Wooden coffins were identified in some graves, while more burials were positioned under stone constructions. Burial assemblages consisted mainly of undecorated pottery, accompanied by bronze (in 19 graves; pins, earrings, necklaces, daggers, axe) and amber artefacts (in 12 graves; beads, spacer), in three cases by seashells, etc. The earliest graves are dated to the Proto-Únětice culture (grave nos. 1–6, 13–15, 29, 39–40; ca. 2300–2150/2100 BC; stage Bz A0). The majority of the graves are dated to the Classic Únětice culture (graves 7–10, 16–28, 30–38, 41–44; ca. 2000–1850 BC; stage Bz A2a) The latest grave, no. 27 of the Post-Classic (Late) Únětice culture, contains a pin with a globular head. The cemetery was completely published (114, 171–174).

Grave 4. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: adultus II – maturus I (35–50). Grave goods: three vessels. Archaeological dating: Proto-Únětice culture. Radiocarbon dating: KIA-35075 ( $3755 \pm 30$ ) 2286–2038 cal BC 2-sigma; MAMS-19125 ( $3791 \pm 24$ ) 2298–2138 cal BC 2-sigma (114). Pandora No.: PMI002. NM Prague Inv. No.: P7A 41112.

Grave 13. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: infans (11–13). Grave goods: one small vessel (jug) and one flint artefact. Archaeological dating: Proto-Únětice culture. Radiocarbon dating: KIA-30941 ( $3770 \pm 35$ ) 2296–2039 cal BC 2-sigma; MAMS-19126 ( $3745 \pm 22$ ) 2271–2042 cal BC 2-sigma (114). Pandora No.: PMI001. NM Prague Inv. No.: P7A 41108.

Grave 29. Skeleton: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – F, aDNA – F. Age: adultus I–II (25–40). Grave goods: three vessels (one Proto-Únětice jug) and two bronze earrings. Archaeological dating: Proto-Únětice culture. Radiocarbon dating: UtC-13189 (3670±35) 2192–1947 cal BC 2-sigma (*114*). Pandora No.: PMI003. NM Prague Inv. No.: P7A 41134.

Grave 39. Skeleton: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – M, aDNA – M. Age: maturus II – senilis (over 50). Grave goods: no grave goods. Archaeological dating: Proto-Únětice culture. Radiocarbon dating: KIA-35083 (3675±30) 2141–1956 cal BC 2-sigma (*114*). Pandora No.: PMI004. NM Prague Inv. No.: P7A 41141.

Grave 40. Skeleton: left-sided crouched burial, head towards the south-south-east. Sex: anthropology – ?, aDNA – M. Age: adultus I (20–30). Grave goods: one small jug in the grave pit fill. Archaeological dating: Proto-Únětice culture. Radiocarbon dating: KIA-35072 (3750±30) 2284–2037 cal BC 2-sigma (*114*). Pandora No.: PMI006. NM Prague Inv. No.: P7A 41142.

Grave 8. Skeleton: decomposed bones deposited on the bottom of the grave pit. Sex: anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: one small vessel, bronze eyelet pin of the Únětice type, two bronze earrings, necklace made of bronze spirals and amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: KIA-35076 (3615±30) 2118–1889 cal BC 2-sigma (*114*). Pandora No.: PMI011. NM Prague Inv. No.: P7A 41115.

Grave 18. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: juvenis (14–20). Grave goods: one small vessel, bronze knot-headed pin of the Cyprus type, three bronze earrings, necklace made of bronze spirals and amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UtC-13186 (3530±40) 2008–1744 cal BC 2-sigma; KIA-35077 (3595±30) 2033–1831 cal BC 2-sigma (*114*). Pandora No.: PMI008. NM Prague Inv. No.: P7A 41124.

Grave 31. Skeleton: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – M, aDNA – M. Age: maturus (40–60). Grave goods: bronze socketed pin. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UtC-13190 (3560±35) 2021–1773 cal BC 2-sigma (*114*). Pandora No.: PMI009. NM Prague Inv. No.: P7A 41135.

Grave 32. Skeleton: right-sided crouched burial, head towards the south-south-east. Sex: anthropology – F?, aDNA – M. Age: maturus II (50–60). Grave goods: bronze dagger, bronze chisel, two ornamented bronze eyelet pins of the Únětice type, four amber beads. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UtC-13191 (3520±35) 1941–1746 cal BC 2-sigma; KIA-35081 (3510±30) 1922–1746 cal BC 2-sigma; MAMS-19129 (3460±21) 1878–1695 cal BC 2-sigma (*114*). Pandora No.: PMI007. NM Prague Inv. No.: P7A 41136.

Grave 42. Skeleton: right-sided crouched burial, head towards the south-east. Sex: anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: one small vessel, bronze neck-eye pin, three bronze earrings, necklace made of bronze spirals, amber beads and one bone bead. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UtC-13192 (3560±40) 2026–1769 cal BC 2-sigma; KIA-35084 (3595±30) 2033–1831 cal BC 2-sigma (*114*). Pandora No.: PMI010. NM Prague Inv. No.: P7A 41145.

Grave 27. Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: infans (8–12). Grave goods: bronze pin with globular head. Archaeological dating: Post-Classic

(Late) Únětice culture. Radiocarbon dating: UtC-13188 (3410±40) 1877–1564 cal BC 2-sigma (*114*). Pandora No.: PMI012. NM Prague Inv. No.: P7A 41133.

32. Praha - Nové Butovice (Stodůlky, Praha 5, central Bohemia, Czech Republic)

*Contact persons: Miroslav Dobeš, Katarína Petriščáková*

Rescue excavation on the building place of the Nové Butovice prefab housing estate in 1986 (J. Kovářík). Among other things (Stroked Pottery culture settlement, Únětice and Bylany culture graves), 32 Corded Ware culture graves were also investigated at the multicultural site over an area of ca. 7 ha. Based on the finds, the graves can be attributed exceptionally to the middle (Group II) and in the vast majority to the late stage of the Corded Ware culture (Group III after *(164)*). DNA analyses were conducted only selectively due to the poor condition of the bones. The graves were comprehensively published in *(165)* (grave nos. 19–50).

Grave 29 (Buchv 38). Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – ?, aDNA – no aDNA. Age: adultus I (20–30). Grave goods: amphora, beaker with the handle, stone battle axe, stone flat axe. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (*165*). Pandora No.: BUT001. NM Prague Inv. No.: P7A 39067.

Grave 33 (Buchv 42). Skeleton: left (?)-sided crouched burial, head towards the east. Sex: archaeology – F?, anthropology – child, aDNA – F. Age: infans (6–7). Grave goods: amphora, pot, two cups, copper spiral temple ring, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (*165*). Pandora No.: BUT002. NM Prague Inv. No.: P7A 39070.

Grave 35 (Buchv 44). Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – ?, aDNA – M. Age: adultus II – matus I (30–50). Grave goods: amphora, cylindrical beaker, two stone flat axes, whetstone, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-41375 (3898±26) 2467–2300 cal BC 2-sigma (*165*). Pandora No.: BUT003. NM Prague Inv. No.: P7A 39072.

33. Praha - Ruzyně (Ruzyně, Praha 6, central Bohemia, Czech Republic)

*Contact person: Milan Kuchařík*

Rescue excavation due to the construction of family houses in 2011–2012 (J. Vávra, P. Zelená). Besides Eneolithic, Bronze Age (Knovíz) and Early Iron Age (Bylany) culture settlements and a grave from the La Tène period, seven inhumation graves of the Bell Beaker culture were also investigated at the multicultural site, six of which were analysed (see below). The cemetery has not been published in detail to date (for preliminary information, see *(175)*).

Grave 1 (feature 5097). Skeleton: right sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F, aDNA – F. Age: matus II – senilis (over 50). Grave goods: bowl. Archaeological dating: Bell Beaker culture, early/middle phase. Radiocarbon dating: MAMS-38482 (3893±25) 2465–2299 cal BC 2-sigma. (Not published). Pandora No.: PRU001A. The City of Prague Museum, Inv. No.: A 628 926–937.

Grave 2 (feature 5004). Skeleton: right sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (8–9). Grave goods: decorated beaker. Archaeological dating: Bell Beaker culture, early/middle phase. Radiocarbon dating: MAMS-30800 ( $3995 \pm 23$ ) 2571–2470 cal BC 2-sigma. (Not published). Pandora No.: PRU002A, B. The City of Prague Museum, Inv. No.: A 627 516–519.

Grave 3 (feature 5045). Skeleton: right sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F, aDNA – F. Age: maturus II (50–60). Grave goods: bowl, two cups. Archaeological dating: Bell Beaker culture, early/middle phase. Radiocarbon dating: MAMS-30801 ( $3957 \pm 24$ ) 2567–2350 cal BC 2-sigma. (Not published). Pandora No.: PRU003A, B. The City of Prague Museum, Inv. No.: A 628 001–015.

Grave 4 (feature 5029). Skeleton: left sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: juvenis – adultus I (18–22). Grave goods: decorated handled beaker, cup. Archaeological dating: Bell Beaker culture, early/middle phase. Radiocarbon dating: MAMS-44707 ( $3848 \pm 24$ ) 2456–2207 cal BC 2-sigma. (Not published). Pandora No.: PRU004.A, B. The City of Prague Museum, Inv. No.: A 627 695–703.

Grave 6 (feature 5087). Skeleton: right sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (10–12). Grave goods: cup Archaeological dating: Bell Beaker culture, early/middle phase. Radiocarbon dating: not available. (Not published). Pandora No.: PRU005A, B, C. The City of Prague Museum, Inv. No.: A 628 907–916.

34. Předměřice nad Labem (Předměřice nad Labem, Hradec Králové district, east Bohemia, Czech Republic)

*Contact persons: Miroslav Dobeš, Petr Velemínský*

The inadequately documented inhumation grave was investigated in the wall of the brickyard in 1921 (F. Žaloudek). This is essentially the same site as in Plotiště nad Labem (see above), since the two brickyards are adjacent to one another. Only one of the accompanying skulls reportedly spread around the skull of the complete burial in a crouched position could be subjected to aDNA analysis. It was published in detail in (176, 177).

Collective grave without number.

Skeletons: right-sided crouched burial, head towards the north-east, and four skulls (one of them was analysed). Grave goods: amphora, jug. Archaeological dating: Globular Amphora culture, eastern group.

Skull. Sex: archaeology – ?, anthropology – F?, aDNA – F. Age: adult? (20–40?). Radiocarbon dating: MAMS-41368 ( $4095 \pm 26$ ) 2858–2504 cal BC 2-sigma (176, 177). Pandora No.: PRE001. NM Prague Inv. No.: P7A 6867 (210c).

35 Radovesice (Radovesice, Teplice district, NW Bohemia, Czech Republic)

The cadastre area of the municipality, gradually destroyed by the activity of the open-cast brown coal mine, was investigated in the 1970s and 80s (J. Muška and P. Budinský, Teplice Museum). Evidence of settlement and burial activities from almost the whole prehistory was found at nearly twenty sites (Radovesice I to XIX). The Corded Ware and Bell Beaker graves described below were discovered at five sites. The sites were between 200 m to 1 km from one another.

### 35.1. Radovesice XVI

*Contact persons: Miroslav Dobeš, Petr Velemínský*

A Corded Ware grave was excavated by P. Budinský in 1983 at the “Pod Chlomkem” location and other features (mostly settlement features) from many other prehistoric periods (Neolithic, Funnel Beaker culture, Bronze Age, Hallstatt and La Tène period) were investigated at the site.

Grave 41/83, in the middle of a round ditch with a diameter of ca. 9 metres.

Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus II (50–60). Grave goods: stone battle axe, bone pin, chipped industry – blade. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-45791 (4081±25) 2852–2498 cal BC 2-sigma (*119*). Pandora No.: RDV001. NM Prague.

### 35.2. Radovesice III and XIII

*Published in (5).*

Bell Beaker culture graves were discovered in two positions approximately 800 m apart.

1. Two inhumation graves were explored in the “Za kostelem” site (Radovesice III) by J. Muška in 1978 (grave nos. 116 and 117/ 78). Both were richly equipped with vessels, copper daggers and an awl, stone wristguards and gold and silver jewellery. Both belong to the typologically earlier Bell Beaker culture.

2. Thirteen graves (here grave nos. 2, 53, 59, 67, 68, 69, 70, 71, 73 and 74/80), twelve inhumations and one cremation, were explored by J. Muška at the “U silnice do Kostomlat” site (Radovesice XIII). They were spread over an area of 100 x 25 m, but it was obviously only part of the cemetery. The vast majority of graves are of the typologically later Bell Beaker culture, for which the incidence of so-called ‘associated pottery’ is typical. Only selected graves are published (*(178)*, preliminary report *(179)*).

Grave 116/78. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II (30–40). Grave goods: decorated beaker, cup, copper dagger, stone wristguard, antler artefact, boar tooth, chipped industry. Archaeological dating: Bell Beaker culture, early stage. Radiocarbon dating: not available (*5, 178*). Master ID and/or other aDNA signs: I7282, RDVS\_116/78. NM Prague Inv. No.: P7A 9320.

Grave 117/78. Skeleton: right-sided crouched burial, head towards the north-east. Sex: archaeology – atypical (right side = female, orientation and grave goods = male), anthropology – F, aDNA – F. Age: maturus II – senilis (over 50). Grave goods: decorated beaker, decorated cup, gold and silver jewellery,

copper dager, copper awl, chipped industry. Archaeological dating: Bell Beaker culture, early stage. Radiocarbon dating: KI-4448 (3860±45 BP) 2464–2205 cal BC 2-sigma (5, 58, 178). Master ID and/or other aDNA signs: I7283, RDVS\_117/78. NM Prague Inv. No.: P7A 9321.

Grave 2/80. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II (30–40). Grave goods: cup. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 178). Master ID and/or other aDNA signs: I7205, RDVS\_02/80. NM Prague Inv. No.: P7A 9323.

Grave 53/80-I. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus I (20–30). Grave goods: beaker, cup, bowl, stone wristguard. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-4352 (3830±20 BP) 2399–2201 cal BC 2-sigma; KI-4449 (3860±40 BP) 2464–2206 cal BC 2-sigma (5, 58, 178). Master ID and/or other aDNA signs: I7286, RDVS\_53/80-I. NM Prague Inv. No.: P7A 9325.

Grave 59/80-I. Disturbed inhumation burial. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (4–5). Grave goods: two cups, bowl, chipped industry. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5). Master ID and/or other aDNA signs: I7287, RDVS\_59/80-I. NM Prague Inv. No.: P7A 9327.

Grave 59/80-II. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II (30–40). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5). Master ID and/or other aDNA signs: I7288, RDVS\_59/80-II. NM Prague Inv. No.: P7A 9328.

Grave 67/80. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus I (40–50). Grave goods: none. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-4353 (3860±20 BP) 2459–2214 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I7289, RDVS\_67/80. NM Prague Inv. No.: P7A 9329.

Grave 68/80. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – matus I (35–50). Grave goods: none. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-4236 (3730±20 BP) 2201–2039 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I7210, RDVS\_68/80. NM Prague Inv. No.: P7A 9330.

Grave 69/80. Skeleton: right-sided crouched burial, head towards the south-west. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: adultus I (20–30). Grave goods: none. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-4345 (3800±20 BP) 2293–2146 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I7211, RDVS\_69/80. NM Prague Inv. No.: P7A 9331.

Grave 70/80. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (8–9). Grave goods: chipped industry. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: PSUAMS-4346 (3840±25 BP) 2456–2203 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I7212, RDVS\_70/80. NM Prague Inv. No.: P7A 9332.

Grave 71/80. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: juvenis (15–18). Grave goods: cup, bowl. Archaeological dating: Bell

Beaker culture, late stage. Radiocarbon dating: PSUAMS-4347 (3835±20 BP) 2431–2202 cal BC 2-sigma (5). Master ID and/or other aDNA signs: I7213, RDVS\_71/80. NM Prague Inv. No.: P7A 9333.

Grave 73/81. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: juvenis (17–20). Grave goods: V-bored amber buttons, amber beads. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5). Master ID and/or other aDNA signs: I7290, RDVS\_73/81. NM Prague Inv. No.: P7A 17334.

Grave 74/81. Skeleton: right-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: juvenis – adultus I (15–25). Grave goods: two cups. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5). Master ID and/or other aDNA signs: I7214, RDVS\_74/81. NM Prague Inv. No.: P7A 17335.

### 35.3-1. Radovesice III

*Published in (61).*

Grave 40/78 was excavated by J. Muška at the “Za kostelem” site.

Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: juvenis (18–20). Grave goods: beaker, amphora, stone flat axe, chipped industry – blade. Archaeological dating: Corded Ware culture, late stage. Radiocarbon dating: PSUAMS-3888 (3885±25 BP) 2464–2295 cal BC 2-sigma (61, 119). Master ID and/or other aDNA signs: I7208, RDVS\_40/78. NM Prague Inv. No.: P7A 9319.

### 35.3-2. Radovesice X

*Published in (61).*

Grave 5/79 was excavated by J. Muška at the “U bílinské silnice” site.

Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus I (40–50). Grave goods: beaker, amphora, jug, stone club and flat axe. Archaeological dating: Corded Ware culture, late stage. Radiocarbon dating: PSUAMS-4026 (3850±25 BP) 2458–2207 cal BC 2-sigma (61, 119) Master ID and/or other aDNA signs: I7209, RDVS\_5/79. NM Prague Inv. No.: P7A 9322.

### 35.3-3. Radovesice XVIII

*Published in (61).*

Grave 4/81 was excavated by P. Budinský at the “Na vyhlídce” site.

Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – maturus I (30–50). Grave goods: beaker, amphora, jug, another vessel, stone battle-axe and flat axe. Archaeological dating: Corded Ware culture, late stage. Radiocarbon dating:

PSUAMS-3887 (3935±25 BP) 2559–2340 cal BC 2-sigma (61, 119). Master ID and/or other aDNA signs: I7207, RDVS\_04/81. NM Prague Inv. No.: P7A 17333.

36. Roudnice nad Labem (Litoměřice district, central Bohemia, Czech Republic)

*Contact persons: Martin Trefný, Jana Kuljavceva Hlavová*

In 2014, a collective inhumation grave from the early stage of early Únětice culture was uncovered during a rescue excavation prior to the construction of a private garden pool. Only one grave was uncovered. The grave was partially damaged by the scraper, causing two skulls to be extracted from the grave. Nevertheless, after the find context was cleaned, it was determined that a major part of the grave had not been affected by the activity of the scraper. The grave pit had an irregular rectangular plan with a length of 2.11 m and a width of 1.0 to 1.05 m. The depth of the grave was 0.7 m.

Únětice collective grave, feature no. 1/2014

Skeletons: The grave contained more or less complete skeletal remnants of at least 18 individuals (ten of which were children) which were not oriented in anthropological positions. On the contrary, the remnants were mixed together, so that it was not possible to identify parts of the skeletons belonging to the individual buried persons. In every case it was evident at first glance that only parts of the bodies had been secondarily buried in the grave.

Grave goods: Eight vessels or remnants thereof were already clearly visible during the excavation and final preparation of the grave. The remnants of eight other vessels were discovered during the removal of the bones. The grave also contained a fragment of a bone needle, a fragment of a silex blade, three shells and three animal teeth, two of which were perforated.

Archaeological dating: stage 2 (Early Únětice) of the Únětice culture after Moucha (112).

Skeleton (skull) 1. Sex: anthropology – F, aDNA – F. Age: matusus (over 40). Radiocarbon dating: not available. Pandora No.: ROU001. Roudnice nad Labem Museum.

Skeleton (skull) 2. Sex: anthropology – F, aDNA – F. Age: adultus II (30–40). Radiocarbon dating: MAMS-44708 (3662±25) 2134–1955 cal BC 2-sigma. Pandora No.: ROU002. Roudnice nad Labem Museum.

Skeleton (skull) 3. Sex: anthropology – child, aDNA – F. Age: infans (9 years ±24 months). Radiocarbon dating: not available. Pandora No.: ROU003. Roudnice nad Labem Museum.

Skeleton (skull) 4. Sex: anthropology – F, aDNA – F. Age: matusus I (40–50). Radiocarbon dating: not available. Pandora No.: ROU004. Roudnice nad Labem Museum.

Skeleton (skull) 5. Sex: anthropology – F, aDNA – M. Age: adultus II (30–40). Radiocarbon dating: not available. Pandora No.: ROU005. Roudnice nad Labem Museum.

Skeleton (skull) 6. Sex: anthropology – F, aDNA – F. Age: matusus (over 40). Radiocarbon dating: not available. Pandora No.: ROU006. Roudnice nad Labem Museum.

Skeleton (skull) 7. Sex: anthropology – M?, aDNA – M. Age: matusus I (40–50). Radiocarbon dating: not available. Pandora No.: ROU007. Roudnice nad Labem Museum.

### 37. Stadice (Stadice, Ústí nad Labem district, NW Bohemia, Czech Republic)

Contact person: Miroslav Dobeš

Excavated in 1987 during the rescue excavation prior to the construction of the D8 motorway (D. Koutecký, M. Cvrková). In addition to settlement features from the Early and Late Bronze Age, three Corded Ware culture inhumation graves were also uncovered at the site. Based on the finds, the graves date to the early period of this culture (Group I and II after (164)). Samples for aDNA analysis were taken from all of them, and their complete publication is found in (180, 181).

Grave 28/87. Skeleton: right-sided crouched burial, head towards the west-north-west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus (20–40). Grave goods: beaker, bowl, stone club. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: not available (180, 181). Pandora No.: STD001. NM Prague Inv. No.: P7A 38886.

Grave 29/87. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (around 2). Grave goods: three shell beads, chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-45792 ( $4177 \pm 25$ ) 2882–2673 cal BC 2-sigma (180, 181). Pandora No.: STD002. NM Prague Inv. No.: P7A 38885.

Grave 67/87. Skeleton: left-sided crouched burial, head towards the north-east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: maturus I (40–50). Grave goods: amphora, bone awl, chipped industry – blade. Archaeological dating: Corded Ware culture, early stage. Radiocarbon dating: MAMS-45793 ( $4314 \pm 25$ ) 3010–2889 cal BC 2-sigma (180, 181). Pandora No.: STD003. NM Prague Inv. No.: P7A 38887.

### 38. Tišice (Tišice, Mělník district, central Bohemia, Czech Republic)

Contact persons: Miroslav Dobeš, Martin Kuna, Petra Stránská, Petr Velemínský

Rescue excavation in the sandpit area in 1996–2008 (D. Dreslerová, M. Kuna, P. Foster, J. Turek). The investigated area of ca. 25 ha produced settlement remains and burials from nearly all periods from the Neolithic up to the Early Middle Ages (a total of nearly 6,000 features), including the two Bell Beaker culture inhumation graves described below. They were discovered in different years (1999 and 2008), with a distance of ca. 450 between them. With the exception of a small amount of settlement evidence, no other artefacts of the discussed culture were found at the site. Only the first of the two inhumation graves (77/99) has been published in greater detail (178).

Grave 77/99. Skeleton: right-sided crouched burial, head towards the south-east. The same grave probably contained a secondary cremation burial. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: adultus II – maturus I (30–50). Grave goods: five decorated bell beakers, cup, pot, two gold hair ornaments, copper dagger, copper awl, two stone wristguards, amber V-perforated button, chipped industry – two flakes, bone artefact (?). Archaeological dating: Bell Beaker culture, early stage. Radiocarbon dating: MAMS-30796 ( $3887 \pm 25$ ) 2464–2296 cal BC 2-sigma (178). Pandora No.: TIS001A, B. NM Prague Inv. No.: P7A 39900.

Grave 5707. Skeleton: right-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: adultus II – maturus I (35–50). Grave goods: decorated bell beaker and other four vessels, chipped industry – flake. Archaeological dating: Bell Beaker culture, early stage. Radiocarbon dating: MAMS-30797 ( $3995 \pm 23$ ) 2571–2470 cal BC 2-sigma. (Not published). Pandora No.: TIS002A, B. NM Prague Inv. No.: P7A 42019.

39. Toušeň (Lázně Toušeň, Prague-East district, central Bohemia, Czech Republic)

*Contact persons: Miroslav Dobeš, Petr Velemínský, Jaroslav Špaček*

Rescue excavation on the fortified hilltop “Hradišťko” settlement at the edge of the left-bank Elbe River terrace (J. Špaček) in 1975–1982, 1997 and 2000–2003. Among settlement and burial finds of the Únětice culture and later periods, numerous Řivnáč culture features were documented, including two inhumation burials and four semi-sunken huts with more human bones. Grave (burial) nr. 15 (see below) has not yet been published in detail but only mentioned in (182, 183).

Grave No. 15. Skeleton: right sided crouched (?) burial, head towards to south-east. Found in a cultural layer, some parts of the skeleton were missing (lower limbs, pelvis). Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (12–18 month). Grave goods: miniature bottle-like vessel with four horns on the greatest diameter (“hanging bottle”). Archaeological dating: Řivnáč culture. Radiocarbon dating: MAMS-41357 ( $4166 \pm 24$ ) 2878–2640 cal BC 2-sigma (182, 183). Pandora No.: TOU001. NM Prague Inv. No.: P7A 9271.

40. Trmice (Ústí nad Labem – Trmice, Ústí nad Labem district, NW Bohemia, Czech Republic)

*Contact person: Miroslav Dobeš*

Excavated in 1982 during the rescue excavation prior to the construction of a prefab concrete panel plant (M. Cvrková, grave no. 109/82 – TRM006) and the nearby D8 motorway in 1987 (D. Koutecký, M. Cvrková, other graves). Two Corded Ware culture graves were uncovered in 1982 (in addition to settlement features from the Late Bronze Age), in 1987 another 15 inhumation graves. Based on the accompanying finds (beakers, amphorae, stone battle-axes, stone flat axes, chipped flat axe, whetstones, chipped industry), all belong to the early phase of the Corded Ware culture (Group I and II after (164)), although a small number of the graves cannot be dated more precisely due to the absence of chronologically-sensitive artefacts (graves without finds, or containing only chipped industry). All of the graves were published in full in (180, 184), including anthropological evaluations in (181, 185).

Grave 4/87. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (6–7). Grave goods: stone battle axe, chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (180, 181). Pandora No.: TRM001. NM Prague Inv. No.: P7A 38896.

Grave 8/87. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – no aDNA. Age: maturus I (40–50). Grave goods: beaker, stone battle axe,

chipped flat axe. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: not available (*180, 181*). Pandora No.: TRM002. NM Prague Inv. No.: P7A 38900.

Grave 10/87. Skeleton: right-sided crouched burial, head towards the east (?). Sex: archaeology – M?, anthropology – M?, aDNA – F. Age: adultus I (20–30). Grave goods: stone battle axe, chipped industry – blade. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-45794 (4093±24) 2856–2506 cal BC 2-sigma (*180, 181*). Pandora No.: TRM003. NM Prague Inv. No.: P7A 38901.

Grave 16/87. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – child, aDNA – no aDNA. Age: infans (around 12). Grave goods: amphora, beaker, chipped industry – two blades. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: not available (*180, 181*). Pandora No.: TRM005. NM Prague Inv. No.: P7A 38903.

Grave 109/82. Skeleton: right-sided crouched burial, head towards the west-south-west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus II (50–60). Grave goods: beaker, stone battle axe, chipped industry – blade. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-45796 (4105±25) 2859–2576 cal BC 2-sigma (*184, 185*). Pandora No.: TRM006. NM Prague Inv. No.: P7A 38608.

#### 41. Tuchoměřice (Tuchoměřice, Prague-West district, central Bohemia, Czech Republic)

Contact person: *Miroslav Dobeš, Lucia Mattiello, Petra Stránská*

Excavated in 1997–1998, 2000 and 2010–2012 during the rescue excavation prior to the construction of warehouse halls, over a total area of ca. 7 ha (I. Pleinerová, A. Veselá, P. Sankot, L. Šulová). A multicultural site (Linear Pottery, Jordanów, Řivnáč culture settlement, Middle Bronze Age, Hallstatt period and Early La Tène), from which two features with the occurrence of human bones are described below. The first of these was a Jordanów culture inhumation burial interpreted as a construction offering, the second a semi-sunken hut of the Řivnáč culture secondarily used for the deposition of six human bodies. These were not accompanied by any grave goods. Besides the skeletons, the hut fill contained common Řivnáč culture settlement discard (pottery, daub, animal bones, chipped industry, etc.). The two features were situated ca. 300 m from each other. The Jordanów culture grave was published in detail (*186, 187*), whereas only a preliminary report has been issued on the Řivnáč culture hut (*188*).

Feature No. 3. Possibly a foundation sacrifice. Skeleton: disturbed burial in an elongated pit with a north-south longitudinal axis. Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (around 12). Grave goods: jug, fragment of stone axe. Archaeological dating: Jordanów culture. Radiocarbon dating: MAMS-41356 (5288±25) 4231–4004 cal BC 2-sigma (*186, 187*). Pandora No.: TUC007. NM Prague Inv. No.: P7A 17395.

Feature 645. Six irregular inhumation burials in a semi-sunken hut. Without directly related goods (only settlement discard from the fill of the feature).

Skeleton/burial 1 (child 1). Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (5–7). Archaeological dating: Řivnáč culture. Radiocarbon dating: not available (*188*). Pandora No.: TUC001. NM Prague Inv. No.: P7A 43315.

Skeleton/burial 2 (child 2). Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (3–5). Archaeological dating: Řivnáč culture. Radiocarbon dating: MAMS-30752 ( $4378 \pm 22$ ) 3085–2916 cal BC 2-sigma (188). Pandora No.: TUC002. NM Prague Inv. No.: P7A 43316.

Skeleton/burial 3 (child 3). Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (3–5). Archaeological dating: Řivnáč culture. Radiocarbon dating: not available (188). Pandora No.: TUC003. NM Prague Inv. No.: P7A 43317.

Skeleton/burial 4 (child 4). Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (2–4). Archaeological dating: Řivnáč culture. Radiocarbon dating: not available (188). Pandora No.: TUC004. NM Prague Inv. No.: P7A 43318.

Skeleton/burial 5 (adultus). Sex: archaeology – ?, anthropology – M, aDNA – M. Age: adultus II – maturus I (35–45). Archaeological dating: Řivnáč culture. Radiocarbon dating: MAMS-30753 ( $4386 \pm 22$ ) 3089–2918 cal BC 2-sigma (188). Pandora No.: TUC005. NM Prague Inv. No.: P7A 43313.

Skeleton/burial 6 (child 5). Sex: archaeology – ?, anthropology – child, aDNA – F. Age: infans (9–11). Archaeological dating: Řivnáč culture. Radiocarbon dating: MAMS-30754 ( $4318 \pm 23$ ) 3010–2891 cal BC 2-sigma (188). Pandora No.: TUC006. NM Prague Inv. No.: P7A 43314.

#### 42.1. Velké Přílepy (Velké Přílepy, Prague-West district, central Bohemia, Czech Republic)

*Contact persons: Miroslav Doběš, Petr Velemínský*

Excavated in 1994–1996 during the rescue excavation prior to the construction of 485 family homes, on a total area of ca. 10 ha (I. Vojtěchovská, L. Smejtek). This multicultural site was used with breaks for settlement and burials from the Eneolithic up to the early medieval period (c. 3700 BC to 1000 AD), including in the period of the Řivnáč culture, which is represented by four settlement features. In one of them (feature 193/95, see below), a human skeleton also accompanied common settlement discard (pottery, daub, animal bones, etc.). The Řivnáč culture settlement has not yet been published in detail, only as a preliminary report in (189).

Feature No. 193, settlement pit. Skeleton: irregular inhumation burial. Sex: archaeology – ?, anthropology – child, aDNA – M. Age: infans (12–15). Without directly related goods (only settlement discard from the fill of the feature). Archaeological dating: Řivnáč culture. Radiocarbon dating: MAMS-41373 ( $4213 \pm 25$ ) 2898–2698 cal BC 2-sigma (189). Pandora No.: VPR001. NM Prague Inv. No.: P7A 16353.

#### 42.2. Velké Přílepy (Velké Přílepy, Prague-West district, central Bohemia, Czech Republic)

*Published in (4, 5).*

The graves described below also come from the same site of Velké Přílepy. The first two samples (from grave nos. 182 and 185) belong to the Bell Beaker culture, the cemetery of which at the site was composed of eight inhumation graves in two groups, all of which can be attributed to the late stage of the discussed culture. One sample (grave no. 238) belongs to the early stage of the Únětice culture (a total of eight graves from this period were investigated at the site). The archaeological context was also preliminarily published

in (189). Three graves with bell beakers were analysed for the occurrence of strontium (nos. 143, 185 and 188), including two described below (138).

Grave 185. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus I (40–50). Grave goods: without grave goods. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 189). Master ID and/or other aDNA signs: I6480, F0551. NM Prague Inv. No.: P7A 16350.

Grave 188. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (13–14). Grave goods: two cups and another vessel. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (5, 189). Master ID and/or other aDNA signs: I6468, F0553. NM Prague Inv. No.: P7A 16351.

Grave 238. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – ?, anthropology – M, aDNA – F. Age: matus I (40–50). Grave goods: one vessel. Archaeological dating: Únětice culture, early stage. Radiocarbon dating: not available (4, 5, 189) – known in (5) as I5035. Master ID and/or other aDNA signs: I4139, RISE577, F0565. NM Prague Inv. No.: P7A 16359.

#### 43. Velké Žernoseky (Velké Žernoseky, Teplice district, NW Bohemia, Czech Republic)

*Published in (61).*

The site is located on the right-bank terrace of the Elbe River and was explored at the turn of the 20th century. The burial grounds were damaged by the mining of porphyry. In addition to an isolated Corded Ware grave (see below), several dozen Funnel Beaker culture (c. 3700–3500 BCE) and Únětice culture (2200–1700 BC) graves were also found at the site.

Grave 27. Skeleton: crouched burial with a southeast-northwest orientation. Only the skull has been preserved from the skeleton. Sex: archaeology – ?, anthropology – M, aDNA – M. Age: matus II – senilis (over 50). Grave goods: two antler belt clasps, bone pin. Archaeological dating: Corded Ware culture, early stage. Radiocarbon dating: MAMS-44710 ( $4127 \pm 25$ ) 2866–2583 cal BC 2-sigma (61, 118, 190). Master ID and/or other aDNA signs: I6696, VEZE\_27. NM Prague Inv. No.: P7A 6589.

#### 44. Vliněves (Mělník district, central Bohemia, Czech Republic)

*Contact persons: Petr Limburský, Miroslav Dobeš, Petr Velemínský*

Excavated in 1999–2008 during the rescue fieldworks in the area of a large sandpit (V. Salač, I. Pleinerová, Ž. Brnić, P. Limburský). An area of ca. 70 ha was investigated, with 30 ha providing traces of settlement activities and burials from many periods of prehistory and the Early Middle Ages. The earliest of them is a fortified Jordanów culture settlement with human burials in a ditch, followed by two graves from the Late Michelsberg/Early Baalberge, a Baden and Řivnáč culture settlement and one Globular Amphora culture (?) collective grave. The Corded Ware culture cemetery is composed of 75 inhumation graves (early to late stage), the Bell Beaker culture cemetery has 34 inhumation graves (late stage) and the Únětice culture cemeteries 304 inhumation graves (primarily from the classic period of the given culture). Settlement traces of varying intensity of the last three mentioned archaeological cultures were also identified at the site, i.e.,

the Corded Ware culture (only intrusions in later features), the Bell Beaker culture (two pits and intrusions in later features) and the Únětice culture (remains of multiple post houses and more than one hundred sunken features with the remains of 57 human skeletons). Finds of the following occupation of the site are represented by the Hallstatt and La Tène period settlements and 21 Migration Period graves.

One inhumation burial from the Jordanów culture ditch, a collective Globular Amphora culture grave (?) and selected human remains from Bell Beaker and Únětice culture graves were chosen for aDNA analysis. Samples were taken from all the skeletons of the Corded Ware culture for the given analysis (or as permitted by the state of preservation). With the exception of the Globular Amphora culture collective grave (feature 3512), the archaeological sources for the studied period were published in full in (116, 191–193); for a short review, see (194).

#### 44.1. Vliněves – Eneolithic Pre-Corded Ware cultures

Grave 2633A. Skeleton: left-sided crouched burial, head towards the west. Sex: archaeology – ?, anthropology – F, aDNA – no aDNA. Age: adultus II – maturus (30–60). Grave goods: bowl. Archaeological dating: Funnel Beaker culture, Michelsberg/Baalberge stage. Radiocarbon dating: KIA-40230 ( $5023 \pm 28$ ) 3942–3712 cal BC 2-sigma (192). Pandora No.: VLI005. NM Prague Inv. No.: P7A 41384.

Grave 2895. Skeleton: left-sided crouched burial, head towards the west-north-west. Sex: archaeology – ?, anthropology – M?, aDNA – M. Age: adultus II – maturus (30–60). Grave goods: no finds. Archaeological dating: Funnel Beaker culture, Michelsberg/Baalberge stage. Radiocarbon dating: MAMS-41358 ( $4949 \pm 25$ ) 3778–3660 cal BC 2-sigma (192). Pandora No.: VLI006. NM Prague Inv. No.: P7A 41400.

Grave 3512. Collective grave with three burials. Grave goods: one jug. Archaeological dating: Globular Amphora culture (??).

Skeleton 1: right-sided crouched burial, head towards the east. Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: adultus I – maturus I? (25–50?). Radiocarbon dating: CRL-10178 ( $3971 \pm 134$ ) 2881–2138 cal BC 2-sigma; MAMS-41361 ( $4046 \pm 27$ ) 2831–2479 cal BC 2-sigma. (Not published). Pandora No.: VLI031. NM Prague Inv. No.: P7A 41406.

Skeleton 2: left-sided crouched burial, head towards the east-south-east. Sex: archaeology – ?, anthropology – M?, aDNA – M. Age: adultus II – maturus I (30–50). Radiocarbon dating: MAMS-41362 ( $4132 \pm 24$ ) 2871–2587 cal BC 2-sigma. (Not published). Pandora No.: VLI032. NM Prague Inv. No.: P7A 41407.

Skeleton 3: right-sided crouched burial, head towards the east-south-east. Sex: archaeology – ?, anthropology – F?, aDNA – M. Age: adultus – matus (over 30). Radiocarbon dating: MAMS-38477 ( $4133 \pm 27$ ) 2871–2589 cal BC 2-sigma. (Not published). Pandora No.: VLI033. NM Prague Inv. No.: P7A 41408.

Feature No.10589/9969 (ditch/causewayed enclosure). Skeleton: right-sided, subtly crouched burial, partially in the prone position, on the bottom of ditch, on its lengthwise axis. Sex: archaeology – ?, anthropology – F, aDNA – F. Age: matus II – senilis (over 50). Without directly related goods (only settlement discard from the filling of feature). Archaeological dating: Jordanów culture. Radiocarbon

dating: KIA-40232 ( $5357\pm27$ ) 4324–4055 cal BC 2-sigma (191). Pandora No.: VLI004. NM Prague Inv. No.: P7A 41992.

#### 44.2. Vliněves – Corded Ware culture

Grave 774. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: maturus? (40–60). Grave goods: amphora. Archaeological dating: Corded Ware culture, early stage. Radiocarbon dating: MAMS-30758 ( $4196\pm21$ ) 2889–2695 cal BC 2-sigma (192). Pandora No.: VLI007. NM Prague Inv. No.: P7A 40934.

Grave 865. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (8–10). Grave goods: drilled animal tooth, shell artefact. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-45798 ( $4171\pm26$ ) 2880–2640 cal BC 2-sigma (192). Pandora No.: VLI071. NM Prague Inv. No.: P7A 40937.

Grave 890. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: adultus II – matus (30–60). Grave goods: amphora, chipped industry – ten flakes (partial intrusion?). Archaeological dating: Corded Ware culture, early stage. Radiocarbon dating: MAMS-30759 ( $4212\pm21$ ) 2894–2703 cal BC 2-sigma (192). Pandora No.: VLI008. NM Prague Inv. No.: P7A 40938.

Grave 957. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus II – matus (30–60). Grave goods: chipped industry – two flakes. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9182 ( $4261\pm118$ ) 3330–2497 cal BC 2-sigma (192). Pandora No.: VLI072. NM Prague Inv. No.: P7A 40939.

Grave 965. Skeleton: left-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: matus (40–60). Grave goods: chipped industry – blade, pebble artefact (intrusion). Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9183 ( $3954\pm81$ ) 2848–2201 cal BC 2-sigma; MAMS-45797 ( $4078\pm25$ ) 2850–2497 cal BC 2-sigma (192). Pandora No.: VLI009. NM Prague Inv. No.: P7A 40940.

Grave 1045. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – ?, aDNA – no aDNA. Age: matus (40–60). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9184 ( $4190\pm100$ ) 3012–2490 cal BC 2-sigma (192). Pandora No.: VLI073. NM Prague Inv. No.: P7A 40956.

Grave 1070. Skeleton: right-sided crouched burial, head towards the west–north–west. Sex: archaeology – M, anthropology – ?, aDNA – no aDNA. Age: juvenis (15–19). Grave goods: chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (192). Pandora No.: VLI074. NM Prague Inv. No.: P7A 40990.

Grave 1071. Skeleton: right-sided crouched burial, head towards the west–north–west. Sex: archaeology – M, anthropology – ?, aDNA – M. Age: juvenis – adultus I (15–30). Grave goods: fragment of beaker (?). Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (192). Pandora No.: VLI075. NM Prague Inv. No.: P7A 40989.

Grave 1113. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M?, aDNA – no aDNA. Age: adultus? (20–40). Grave goods: amphora, jug, another vessel, stone battle axe, stone flat axe. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI066. NM Prague Inv. No.: P7A 41008.

Grave 1423. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (3–5). Grave goods: two drilled animal teeth, 25 shell beads. Archaeological dating: Corded Ware culture, aceramic/middle stage. Radiocarbon dating: MAMS-38472 ( $4027\pm25$ ) 2618–2475 cal BC 2-sigma (192). Pandora No.: VLI010. NM Prague Inv. No.: P7A 41010.

Grave 1494. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: juvenis – adultus I (16–25). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9188 ( $4288\pm79$ ) 3308–2624 cal BC 2-sigma; MAMS-41360 ( $4173\pm24$ ) 2880–2671 cal BC 2-sigma (192). Pandora No.: VLI067. NM Prague Inv. No.: P7A 41014.

Grave 1515. Skeleton: left-sided crouched burial, head towards the east-north-east. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: maturus (40–60). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9189 ( $4225\pm81$ ) 3015–2579 cal BC 2-sigma; MAMS-45799 ( $4340\pm25$ ) 3018–2901 cal BC 2-sigma (192). Pandora No.: VLI076. NM Prague Inv. No.: P7A 41018.

Grave 1653. Skeleton: left-sided crouched burial, head towards the east-north-east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9190 ( $4261\pm88$ ) 3261–2578 cal BC 2-sigma (192). Pandora No.: VLI077. NM Prague Inv. No.: P7A 41019.

Grave 2283. Skeleton: disturbed, position unknown. Sex: archaeology – ?, anthropology – child, aDNA – no aDNA. Age: infans (1–6). Grave goods: amphora, beaker (?), cylindrical beaker, bowl, miniature vessel. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI078. NM Prague Inv. No.: P7A 41067.

Grave 2583. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – child, aDNA – F. Age: infans (5–7). Grave goods: no finds. Archaeological dating: Corded Ware culture (?), aceramic. Radiocarbon dating: MAMS-47026 ( $4095\pm23$ ) 2853–2503 cal BC 2-sigma (192). Pandora No.: VLI079. NM Prague Inv. No.: P7A 41096.

Grave 2699. Skeleton: left-sided crouched burial, head towards the east-south-east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: ? Grave goods: chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (192). Pandora No.: VLI080. NM Prague Inv. No.: P7A 41398.

Grave 2891. Skeleton: right-sided crouched burial, head towards the west-north-west. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (7–13). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (192). Pandora No.: VLI081. NM Prague Inv. No.: P7A 41104.

Grave 2898–1 (upper grave, probably earlier). Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – ?, aDNA – no aDNA. Age: maturus? (40–60). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: not available (192). Pandora No.: VLI082. NM Prague Inv. No.: P7A 41106.

Grave 2898–2 (lower grave, probably later). Skeleton: left-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – F?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: four bone beads, chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9192 ( $4226 \pm 95$ ) 3089–2497 cal BC 2-sigma (192). Pandora No.: VLI083. NM Prague Inv. No.: P7A 41107.

Grave 3935. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – ?, aDNA – no aDNA. Age: adultus I (20–30). Grave goods: amphora, beaker, stone club, chipped industry – blade and flake. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI084. NM Prague Inv. No.: P7A 41427.

Grave 4214A. Skeleton: right-sided crouched burial, head towards the north-west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus (40–60). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9194 ( $4133 \pm 87$ ) 2896–2488 cal BC 2-sigma; MAMS-44711 ( $4174 \pm 25$ ) 2881–2669 cal BC 2-sigma (192). Pandora No.: VLI011. NM Prague Inv. No.: P7A 41603.

Grave 4291. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: amphora, cup, pot, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI012. NM Prague Inv. No.: P7A 41441.

Grave 4295. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: amphora, pot, bowl, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI013. NM Prague Inv. No.: P7A 41442.

Grave 4307. Skeleton: right-sided crouched burial, head towards the west-north-west. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (3–5). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: MAMS-45800 ( $4110 \pm 27$ ) 2862–2576 cal BC 2-sigma (192). Pandora No.: VLI085. NM Prague Inv. No.: P7A 41446.

Grave 4322. Skeleton: left-sided crouched burial, head towards the east-south-east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: amphora, pot, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI086. NM Prague Inv. No.: P7A 41448.

Grave 4391. Skeleton: left-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: amphora, beaker with the handle, two jars, bowl, another vessel, chipped industry – blade. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: not available (192). Pandora No.: VLI068. NM Prague Inv. No.: P7A 41454.

Grave 4398. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus – matus (20–60). Grave goods: amphora, jug. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (192). Pandora No.: VLI014. NM Prague Inv. No.: P7A 41477.

Grave 4406. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: juvenis – adultus I (15–30). Grave goods: amphora, beaker with the handle, whetstone. Archaeological dating: Corded Ware culture, local (late) stage (?). Radiocarbon dating: not available (192). Pandora No.: VLI087. NM Prague Inv. No.: P7A 41566.

Grave 4584. in the middle of a circular ditch. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – child, aDNA – no aDNA. Age: infans (2–4). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: KIA-40231 ( $4125 \pm 26$ ) 2866–2582 cal BC 2-sigma (192). Pandora No.: VLI069. NM Prague Inv. No.: P7A 41481.

Grave 4757. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: matus – senilis (over 40). Grave goods: chipped industry – two blades. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9198 ( $4247 \pm 80$ ) 3085–2581 cal BC 2-sigma (192). Pandora No.: VLI015. NM Prague Inv. No.: P7A 41701.

Grave 4871. Skeleton: left-sided, subtly crouched burial (prone position), head towards the west (anomalous position). Sex: archaeology – ?, anthropology – ?, aDNA – M. Age: juvenis (15–18). Grave goods: amphora, stones and animal bone – intrusion. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-38473 ( $3913 \pm 26$ ) 2472–2303 cal BC 2-sigma (192). Pandora No.: VLI016. NM Prague Inv. No.: P7A 41706.

Grave 5358. Skeleton: left-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: adultus – matus (20–60). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9199 ( $4217 \pm 92$ ) 3081–2498 cal BC 2-sigma (192). Pandora No.: VLI088. NM Prague Inv. No.: P7A 41715.

Grave 5379. Skeleton: left-sided crouched burial, head towards the east-south-east. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: adultus (20–40). Grave goods: amphora, two jars, chipped industry – blade. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-38474 ( $3902 \pm 28$ ) 2469–2300 cal BC 2-sigma (192). Pandora No.: VLI017. NM Prague Inv. No.: P7A 41718.

Grave 5432. Skeleton: right-sided crouched burial (disturbed), head towards the west. Sex: archaeology – M, anthropology – ?, aDNA – no aDNA. Age: adultus – matus (20–60). Grave goods: chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9200 ( $4256 \pm 82$ ) 3089–2583 cal BC 2-sigma (192). Pandora No.: VLI089. NM Prague Inv. No.: P7A 41720.

Grave 5790. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus II? (30–40). Grave goods: amphora (fragment). Archaeological dating: Corded Ware culture, local (late) stage (?). Radiocarbon dating: CRL-9201 ( $3961 \pm 99$ ) 2861–2148 cal BC 2-sigma; MAMS-41359 ( $3776 \pm 23$ ) 2286–2138 cal BC 2-sigma; MAMS-46362 ( $3918 \pm 21$ ) 2473–2311 cal BC 2-sigma (192). Pandora No.: VLI070. NM Prague Inv. No.: P7A 41737.

Grave 6094. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: adultus – matus (20–60). Grave goods: amphora, beaker, jug, pot. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-30760 (3941±21) 2557–2346 cal BC 2-sigma (192). Pandora No.: VLI018. NM Prague Inv. No.: P7A 41743.

Grave 7473. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – ?, aDNA – F. Age: matus – senilis (over 40). Grave goods: bone awl, chipped industry – flake. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9203 (4241±84) 3085–2578 cal BC 2-sigma (192). Pandora No.: VLI090. NM Prague Inv. No.: P7A 41750.

Grave 7520. Skeleton: left-sided crouched burial, head towards the south-east. Sex: archaeology – F, anthropology – F, aDNA – no aDNA. Age: adultus (20–40). Grave goods: no finds. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-9204 (4184±82) 2922–2495 cal BC 2-sigma (192). Pandora No.: VLI091. NM Prague Inv. No.: P7A 41751.

Grave 8171A. Skeleton: right-sided crouched burial, head towards the west. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus II – matus (30–60). Grave goods: beaker, whetstone. Archaeological dating: Corded Ware culture, middle stage. Radiocarbon dating: MAMS-38475 (not enough collagen) (192). Pandora No.: VLI019. NM Prague Inv. No.: P7A 41802.

Grave 9566A. Skeleton: right-sided crouched burial, head towards the west-north-west. Sex: archaeology – M, anthropology – M?, aDNA – M. Age: matus? (40–60). Grave goods: chipped industry – blade. Archaeological dating: Corded Ware culture, aceramic. Radiocarbon dating: CRL-10180 (4057±87) 2881–2349 cal BC 2-sigma; MAMS-45801 (4176±26) 2882–2669 cal BC 2-sigma (192). Pandora No.: VLI092. NM Prague Inv. No.: P7A 41821.

Grave 9730. Skeleton: left-sided crouched burial, head towards the east. Sex: archaeology – F, anthropology – F, aDNA – F. Age: adultus I (20–30). Grave goods: two amphorae, jug, cup, two drilled shell disks, bone awl. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: MAMS-30761 (3966±25) 2570–2353 cal BC 2-sigma (192). Pandora No.: VLI020. NM Prague Inv. No.: P7A 41824.

#### 44.3. Vliněves – Bell Beaker culture

Grave 4333/H225. Skeleton: disturbed inhumation burial. Sex: archaeology – ?, anthropology – F?, aDNA – no aDNA. Age: adultus I (20–30). Grave goods: cup, fragments of another cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30762 (3815±21) 2338–2152 cal BC 2-sigma (193). Pandora No.: VLI021. NM Prague Inv. No.: P7A 41680.

Grave 4335/H226. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – F?, aDNA – F. Age: juvenis – adultus I (15–30). Grave goods: cup, handled pot. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30763 (3848±26) 2456–2207 cal BC 2-sigma (193). Pandora No.: VLI022. NM Prague Inv. No.: P7A 41479.

Grave 4339/H227. Skeleton: left-sided crouched burial, head towards the north-east-north. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: adultus? (20–40?). Grave goods: no finds. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (193). Pandora No.: VLI023. NM Prague Inv. No.: P7A 41681.

Grave 4340/H228. Skeleton: left-sided crouched burial, head towards the north-north-east. Sex: archaeology – M, anthropology – child, aDNA – M. Age: infans (9–12). Grave goods: no finds. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (193). Pandora No.: VLI024. NM Prague Inv. No.: P7A 41449.

Grave 4392/H234. Skeleton: left-sided crouched burial, head towards the north-east-north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: maturus (40–60). Grave goods: cup. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (193). Pandora No.: VLI025. NM Prague Inv. No.: P7A 41455.

Grave 4464/H244. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – M??, aDNA – F. Age: adultus I (20–30). Grave goods: cup, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (193). Pandora No.: VLI026. NM Prague Inv. No.: P7A 41570.

Grave 4467/H245. Skeleton: right-sided crouched burial, head towards the south. Sex: archaeology – F, anthropology – ?, aDNA – no aDNA. Age: ? Grave goods: two cups, handled pot. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30764 (no collagen) (193). Pandora No.: VLI027. NM Prague Inv. No.: P7A 41572.

Grave 4468/H246. Skeleton: right-sided crouched burial (?), head towards the south. Sex: archaeology – F?, anthropology – ?, aDNA – M. Age: adultus II – maturus? (30–60). Grave goods: two cups, bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: MAMS-30765 (no collagen) (193). Pandora No.: VLI028. NM Prague Inv. No.: P7A 41573.

Grave 4471/H248. Skeleton: left-sided crouched burial, head towards the north-east-north. Sex: archaeology – M, anthropology – M, aDNA – M. Age: adultus I (20–30). Grave goods: bowl. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (193). Pandora No.: VLI029. NM Prague Inv. No.: P7A 41574.

Grave 4475/H251. Skeleton: left-sided crouched burial, head towards the north. Sex: archaeology – M, anthropology – ?, aDNA – M. Age: adultus – maturus (20–60). Grave goods: no finds. Archaeological dating: Bell Beaker culture, late stage. Radiocarbon dating: not available (193). Pandora No.: VLI030. NM Prague Inv. No.: P7A 41577.

#### 44.4. Vliněves – Early Bronze Age

Grave 40 (Group 1): Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – F?, aDNA – F. Age: adultus I (20–25). Grave goods: no. Archaeological dating: Early Únětice culture (based on the position in the grave group). Radiocarbon dating: not available (116). Pandora No.: VLI047. NM Prague Inv. No.: P7A 40930.

Grave 75 (Group 1): Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: adult (over 20). Grave goods: one small vessel, bronze pin of the Cyprus type, five bronze earrings, necklace made of bronze spirals and amber beads. Archaeological dating: Classic Únětice culture (BzA2). Radiocarbon dating: UBA-23635 (3536±34) 1953–1754 cal BC 2-sigma; CRL-19336 (3554±33) 2014–1772 cal BC 2-sigma (116). Pandora No.: VLI046. NM Prague Inv. No.: P7A 40976.

Grave 361 (Group 6): Skeleton: right-sided crouched burial, head towards the south-south-west. Sex: anthropology – ?, aDNA – no aDNA. Age: adult (over 20). Grave goods: two vessels. Archaeological dating: Early Únětice culture, cemetery phase 4+5. Radiocarbon dating: MAMS-30769 (sample is missing) (116). Pandora No.: VLI063. NM Prague Inv. No.: P7A 41740.

Grave 371 (Group 8): Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – child, aDNA – F. Age: infans (to 7). Grave goods: no. Archaeological dating: Early (?) Únětice culture, based on position towards grave no. 370). Radiocarbon dating: not available (116). Pandora No.: VLI039. NM Prague Inv. No.: P7A 41095.

Grave 395 (Group 9): Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – F, aDNA – F. Age: adultus (20–40). Grave goods: one small vessel, two bronze pins of the Únětice type, two bronze earrings, one bronze lock-ring, 21 bronze beads and five amber beads. Archaeological dating: Classic Únětice culture, cemetery phase 5. Radiocarbon dating: UBA-27395 ( $3623 \pm 58$ ) 2193–1780 cal BC 2-sigma (116). Pandora No.: VLI045. NM Prague Inv. No.: P7A 41650.

Grave 437 (Group 9):

Skeleton 1: right-sided crouched burial, head towards the south-south-west. Sex: anthropology – F?, aDNA – F. Age: adultus (20–40). Grave goods: one vessel, two bronze pins of Únětice type, two bronze earrings. Archaeological dating: Classic Únětice culture. Radiocarbon dating: older than 14C-dated primary burial skeleton 2 (see below) (116). Pandora No.: VLI060. NM Prague Inv. No.: P7A 41777.

Skeleton 2: right-sided crouched burial, head towards the north-east. Sex: anthropology – ?, aDNA – F. Age: maturus (over 40). Grave goods: no. Archaeological dating: Classic Únětice culture. Radiocarbon dating: UBA-27396 ( $3618 \pm 52$ ) 2139–1824 cal BC 2-sigma (116). Pandora No.: VLI065. NM Prague Inv. No.: P7A 41662.

Grave 443 (Group 9): Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – child, aDNA – M. Age: infans (7–9). Grave goods: bronze pin of Únětice type, bronze bracelet, amber bead/pendant. Archaeological dating: Classic Únětice culture (BzA2). Radiocarbon dating: UBA-27398 ( $3504 \pm 41$ ) 1936–1698 cal BC 2-sigma (116). Pandora No.: VLI042. NM Prague Inv. No.: P7A 41671.

Grave 459 (Group 9):

Skeleton 2: right-sided crouched burial, head towards the south. Sex: anthropology – F?, aDNA – no aDNA. Age: adultus II – senilis (over 30). Grave goods: bronze pin of Únětice type, fragments of three to four bronze earrings, necklace made of bronze spirals and amber beads. Archaeological dating: Classic Únětice culture (BzA2). Radiocarbon dating: not available (116). Pandora No.: VLI041. NM Prague Inv. No.: P7A 41665.

Grave 465 (Group 9): Skeleton: right-sided crouched burial, head towards the south. Sex: anthropology – M?, aDNA – no aDNA. Age: adultus (20–40). Grave goods: no. Archaeological dating: Classical Únětice culture (?) (based on position in the grave group 9). Radiocarbon dating: not available (116). Pandora No.: VLI0040. NM Prague Inv. No.: P7A 41672.

Grave 504 (Group 12): Skeleton: right-sided crouched burial, head towards the north. Sex: anthropology – F, aDNA – F. Age: maturus II – senilis (over 50). Grave goods: two bronze nail-headed pins. Archaeological

dating: early beginning of the Middle Bronze Age Tumulus culture (BzA2/B1–BzB1). Radiocarbon dating: not available (*116*). Pandora No.: VLI053. NM Prague Inv. No.: P7A 41397.

Grave 514 (Group 12):

Skeleton 1: bones disturbed and dislocated, position of the skeleton indeterminable. Sex: anthropology – M?, aDNA – M. Age: maturus II – senilis (over 50). Grave goods: fragmented bronze pin of Únětice type. Archaeological dating: Classic Únětice culture (BzA2). Radiocarbon dating: UBA-23640 ( $3509 \pm 29$ ) 1913–1749 cal BC 2-sigma (*116*). Pandora No.: VLI054. NM Prague Inv. No.: P7A 41440.

Grave 515 (Group 13): Skeleton: right-sided crouched burial, head towards the south-east. Sex: anthropology – F, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: one small vessel. Archaeological dating: Únětice culture, cemetery phase 4+5+6. Radiocarbon dating: no (MAMS-30767, insufficient collagen) (*116*). Pandora No.: VLI062. NM Prague Inv. No.: P7A 41725.

Grave 517 (Group 13): Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – F, aDNA – F. Age: maturus (over 40). Grave goods: two vessels, three animal teeth. Archaeological dating: Proto-Únětice/Early Únětice culture, cemetery phase 2. Radiocarbon dating: not available (*116*). Pandora No.: VLI061. NM Prague Inv. No.: P7A 41726.

Grave 520 (Group 13): Skeleton: left-sided crouched burial, head towards the south-west. Sex: anthropology – ?, aDNA – F. Age: maturus – senilis (over 40). Grave goods: two vessels. Archaeological dating: Early Únětice culture, cemetery phase 3/4. Radiocarbon dating: UBA-23642 ( $3725 \pm 28$ ) 2200–2035 cal BC 2-sigma (*116*). Pandora No.: VLI058. NM Prague Inv. No.: P7A 41735.

Grave 521 (Group 13): Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – F?, aDNA – F. Age: juvenis – adultus I (15–25). Grave goods: two vessels. Archaeological dating: Early Únětice culture, cemetery phase 2. Radiocarbon dating: MAMS-30768 ( $3677 \pm 25$ ) 2139–1977 cal BC 2-sigma (*116*). Pandora No.: VLI064. NM Prague Inv. No.: P7A 41724.

Grave 533 (isolated grave): Skeleton: right-sided crouched burial, head towards the west-west-south. Sex: anthropology – M?, aDNA – no aDNA. Age: adultus – maturus (20–60). Grave goods: bronze dagger, bronze axe, bone awl. Archaeological dating: Classic/Post-Classical (Late) Únětice culture (BzA2–BzA2/B1). Radiocarbon dating: UBA-23643 ( $3454 \pm 27$ ) 1878–1691 cal BC 2-sigma; CRL-19344 ( $3492 \pm 21$ ) 1884–1750 cal BC 2-sigma (*116*). Pandora No.: VLI048. NM Prague Inv. No.: P7A 41742.

Feature 2415 (settlement pit): Skeleton: right-sided crouched burial, head towards the south-west. Sex: anthropology – M, aDNA – no aDNA. Age: maturus – senilis (over 40). Grave goods: flint dagger. Archaeological dating: BzA2–BzA2/BzB1. Radiocarbon dating: MAMS-30770 ( $3454 \pm 24$ ) 1877–1692 cal BC 2-sigma (*116*). Pandora No.: VLI0049. NM Prague Inv. No.: P7A 41084.

Feature 2427 (settlement pit with human skeleton): Skeleton: left-sided crouched burial, head towards the south. Sex: anthropology – F, aDNA – F. Age: maturus (40–60). Grave goods: one vessel, two fragments of grinding stones. Archaeological dating: Classic to Post-Classical Únětice culture, cemetery phase 6. Radiocarbon dating: UBA-23638 ( $3526 \pm 36$ ) 1947–1749 cal BC 2-sigma; + from animal bone (sheep/goat neonat. UBA-23646 ( $3348 \pm 27$ ) 1735–1534 cal BC 2-sigma (*116*). Pandora No.: VLI050. NM Prague Inv. No.: P7A 41085.

Feature 2544 (settlement pit): Skeleton: left-sided (?) crouched burial, head towards the south-west, dislocated parts of skeleton. Sex: anthropology – M, aDNA – M. Age: maturus II – senilis (over 50). Grave goods: Without directly related goods (only settlement discard from the fill of feature). Archaeological dating: Classic to Post-Classic Únětice culture. Radiocarbon dating: UBA-23639 ( $3378 \pm 30$ ) 1745–1615 cal BC 2-sigma; MAMS-44712 ( $3449 \pm 25$ ) 1877–1689 cal BC 2-sigma (116). Pandora No.: VLI051. NM Prague Inv. No.: P7A 41088.

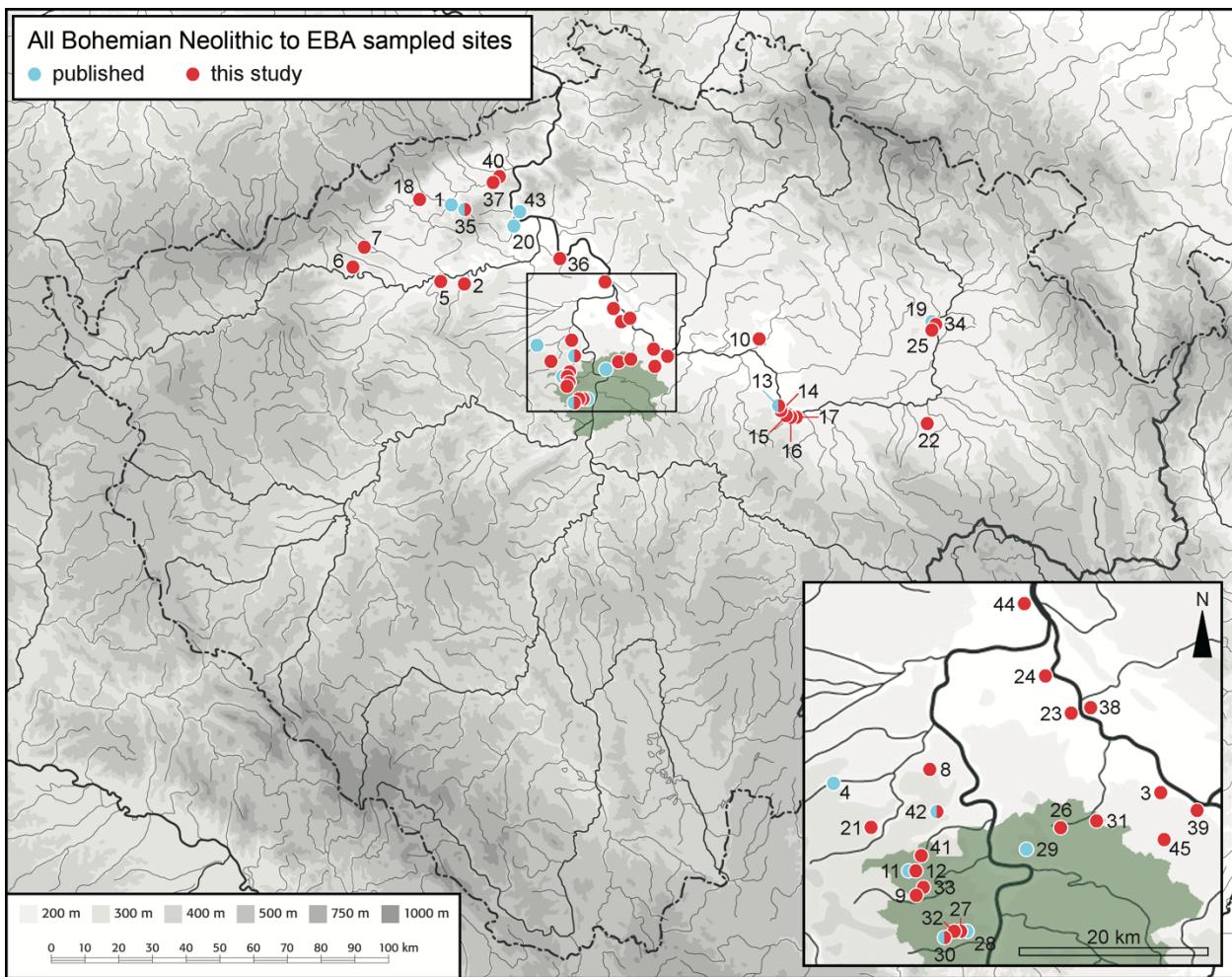
45. Zeleneč (Zeleneč, Prague-East district, central Bohemia, Czech Republic)

Contact person: *Miroslav Dobeš*

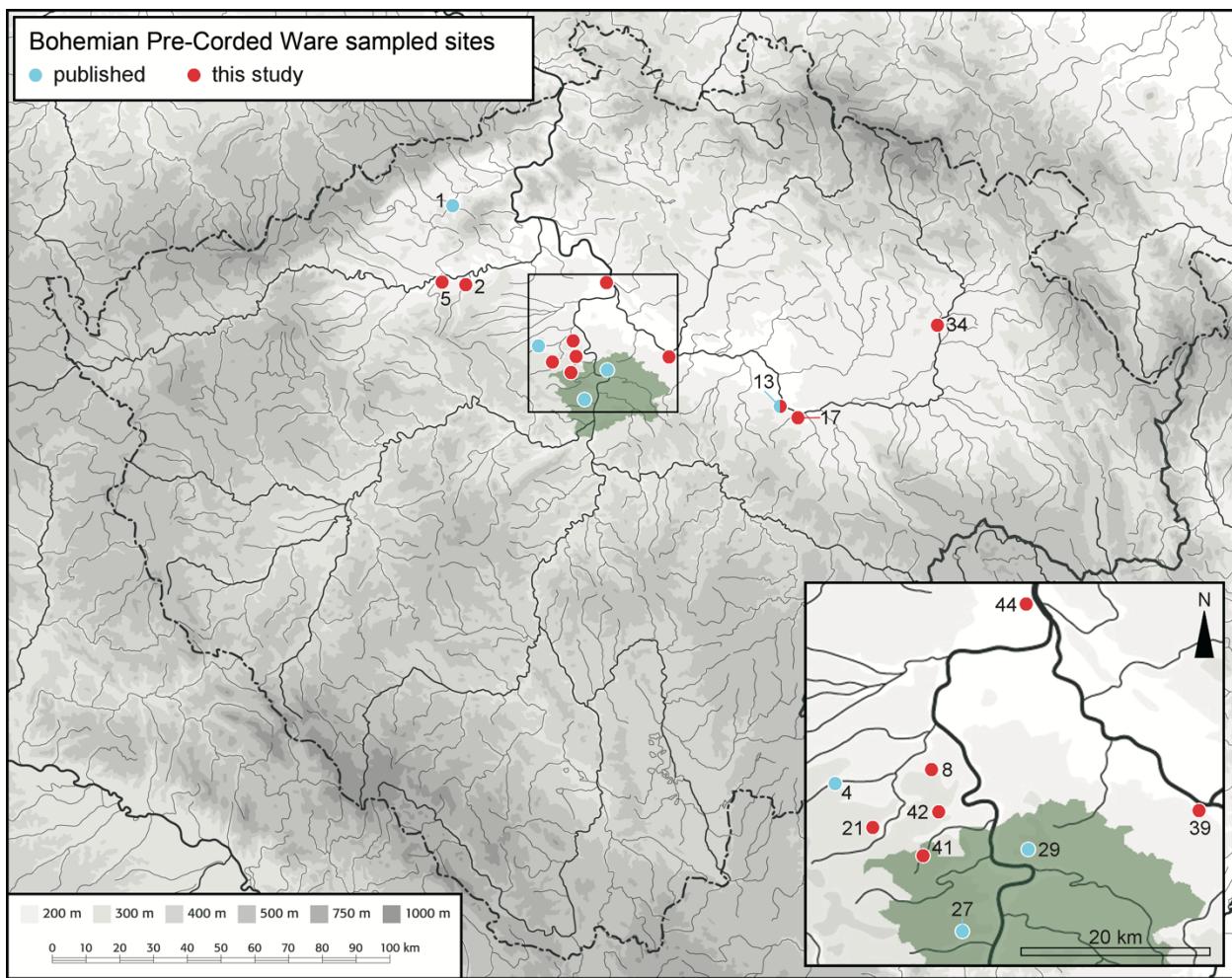
Rescue excavation prior to the construction of a group of family homes in 2004 (J. Špaček). The excavation area provided more than one-hundred graves from the Early Middle Ages also four graves from the Corded Ware culture, from which one skeleton described below was analysed for aDNA. The Corded Ware culture graves dated to its late phase were published in full in (195).

Grave 18. Skeleton: left-sided crouched burial, head towards the east. In the grave together with a right-sided crouched burial, head towards the east (infans, around 1). Sex: archaeology – F, anthropology – ?, aDNA – F. Age: juvenis (15–20). Grave goods: two amphorae, beaker, pot, single handled cup, two handled cup, another vessel, stone battle axe, copper spiral temple ring, copper wire, whetstone, chipped industry – blade. Archaeological dating: Corded Ware culture, local (late) stage. Radiocarbon dating: not available (195). Pandora No.: ZEL001. NM Prague Inv. No.: P7A 18774.

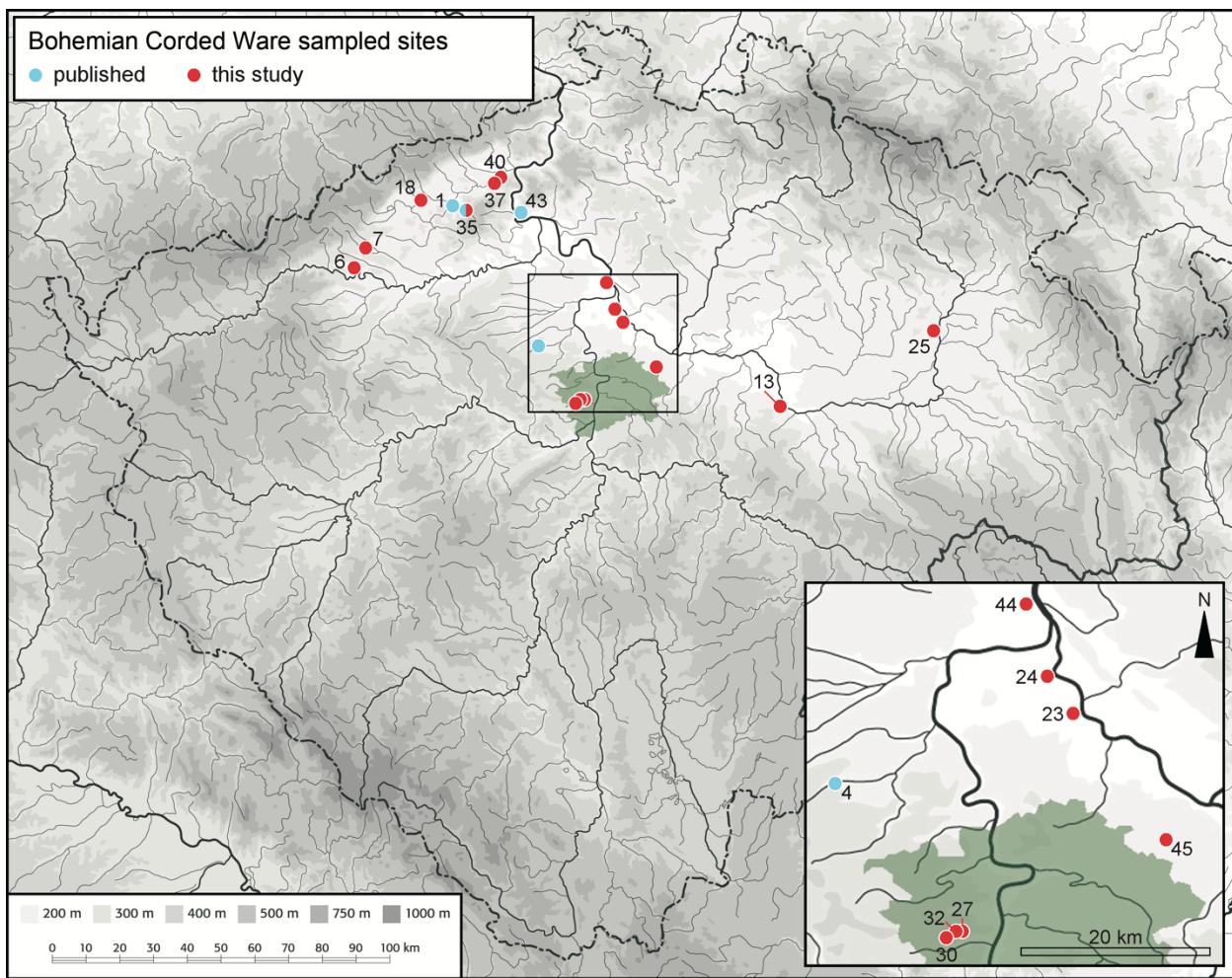
## Supplementary Figures



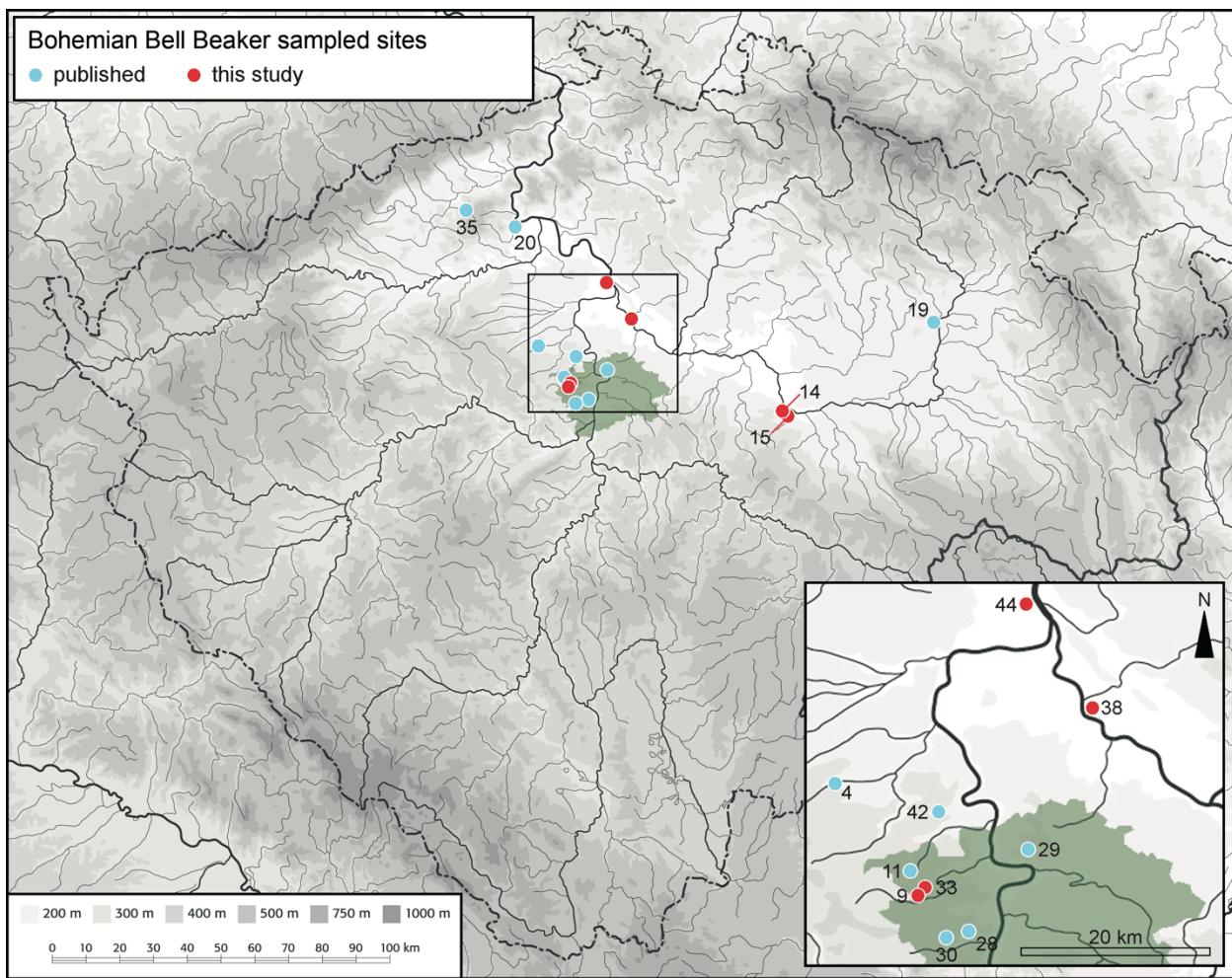
**Fig. S1. All Neolithic to EBA sampled sites.** Site numbers correspond to site names listed above and in the site descriptions (Table S2). Green: Metropolitan area of Prague (capital city). Graphic M. Ernée, M. Dobeš.



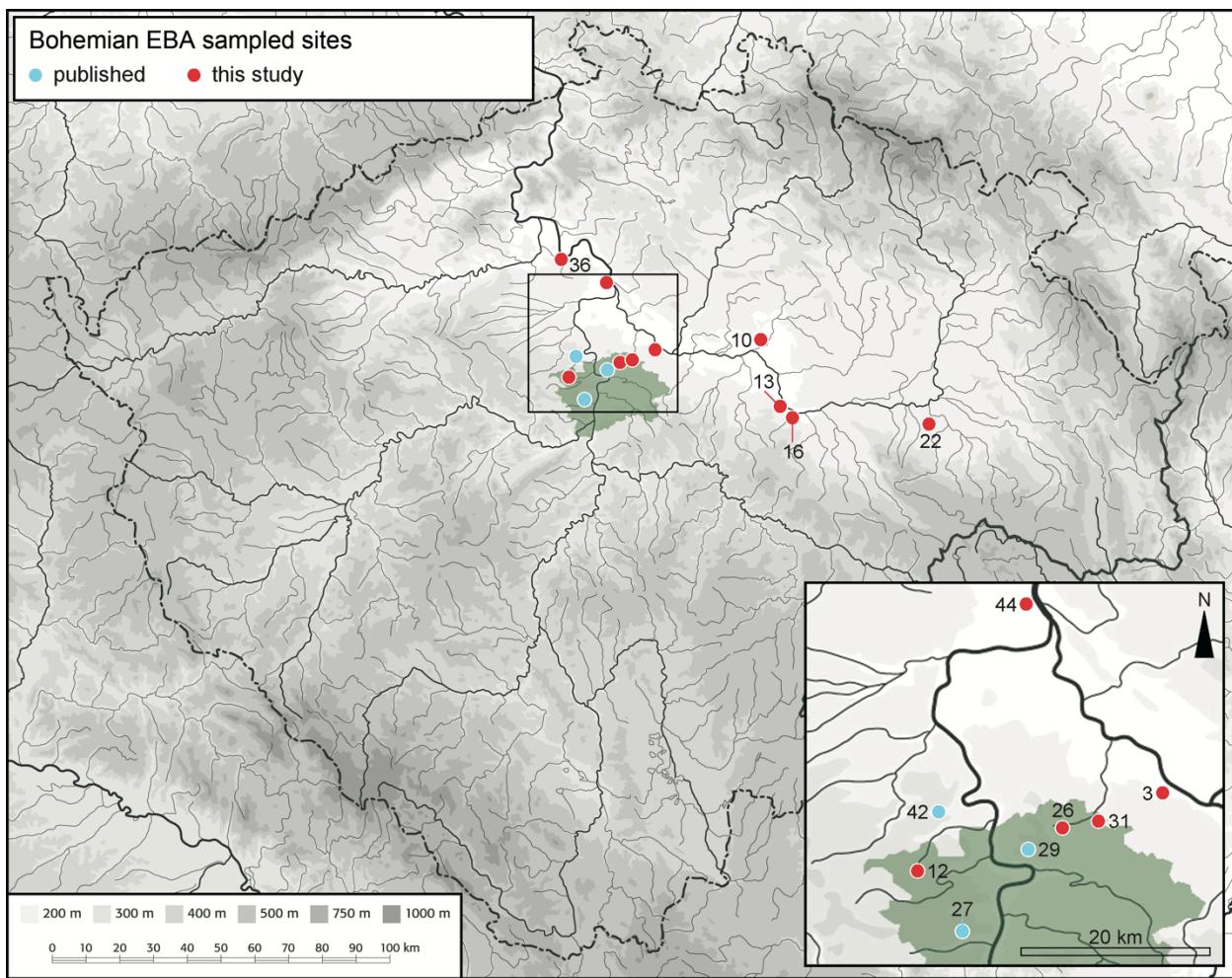
**Fig. S2. Pre-Corded Ware sampled sites.** Site numbers correspond to site names listed above and in the site descriptions (Table S2). Green: Metropolitan area of Prague (capital city). Graphic M. Ernée, M. Dobeš.



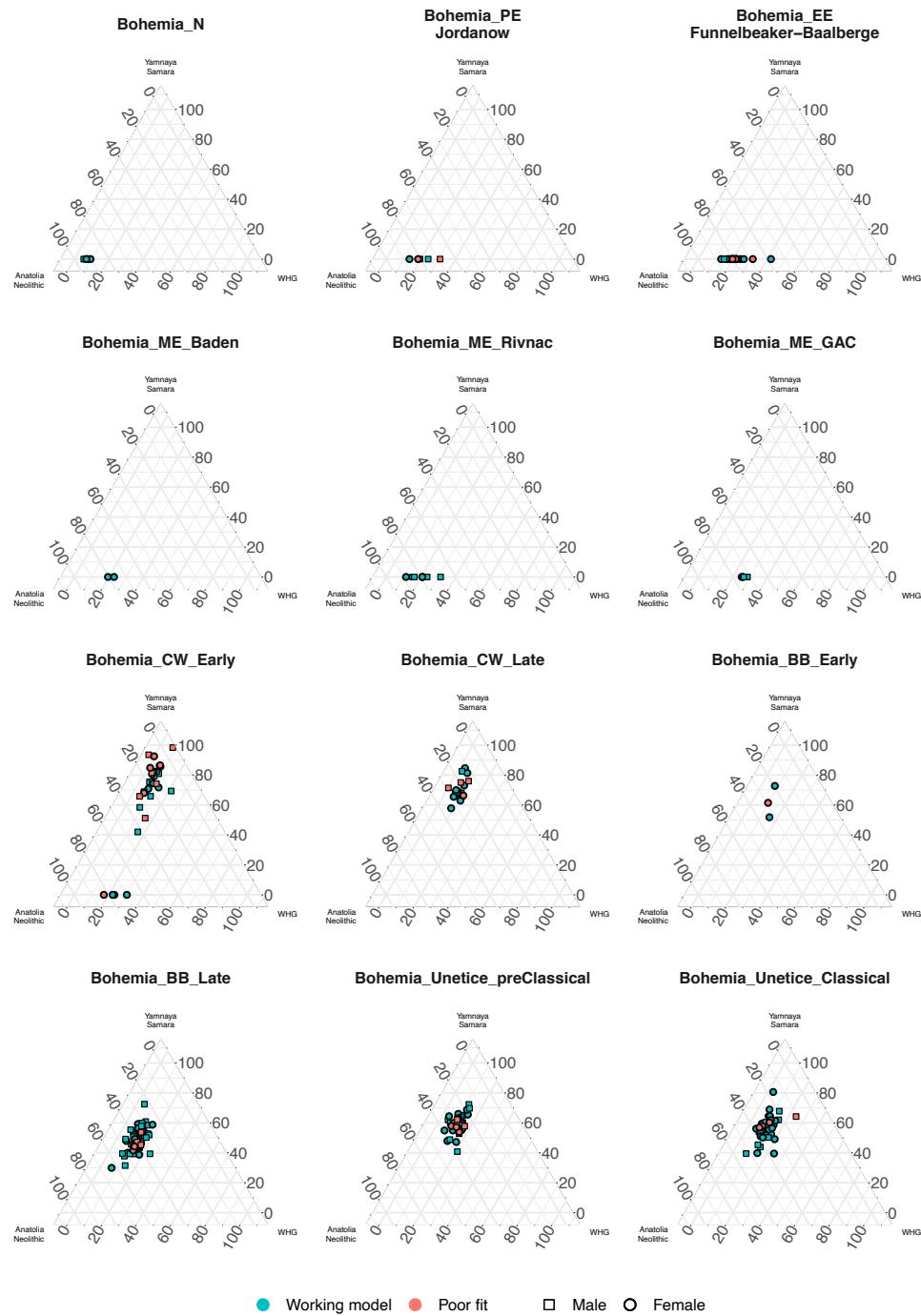
**Fig. S3. Corded Ware sampled sites.** Site numbers correspond to site names listed above and in the site descriptions (Table S2). Green: Metropolitan area of Prague (capital city). Graphic M. Ernée, M. Dobeš.



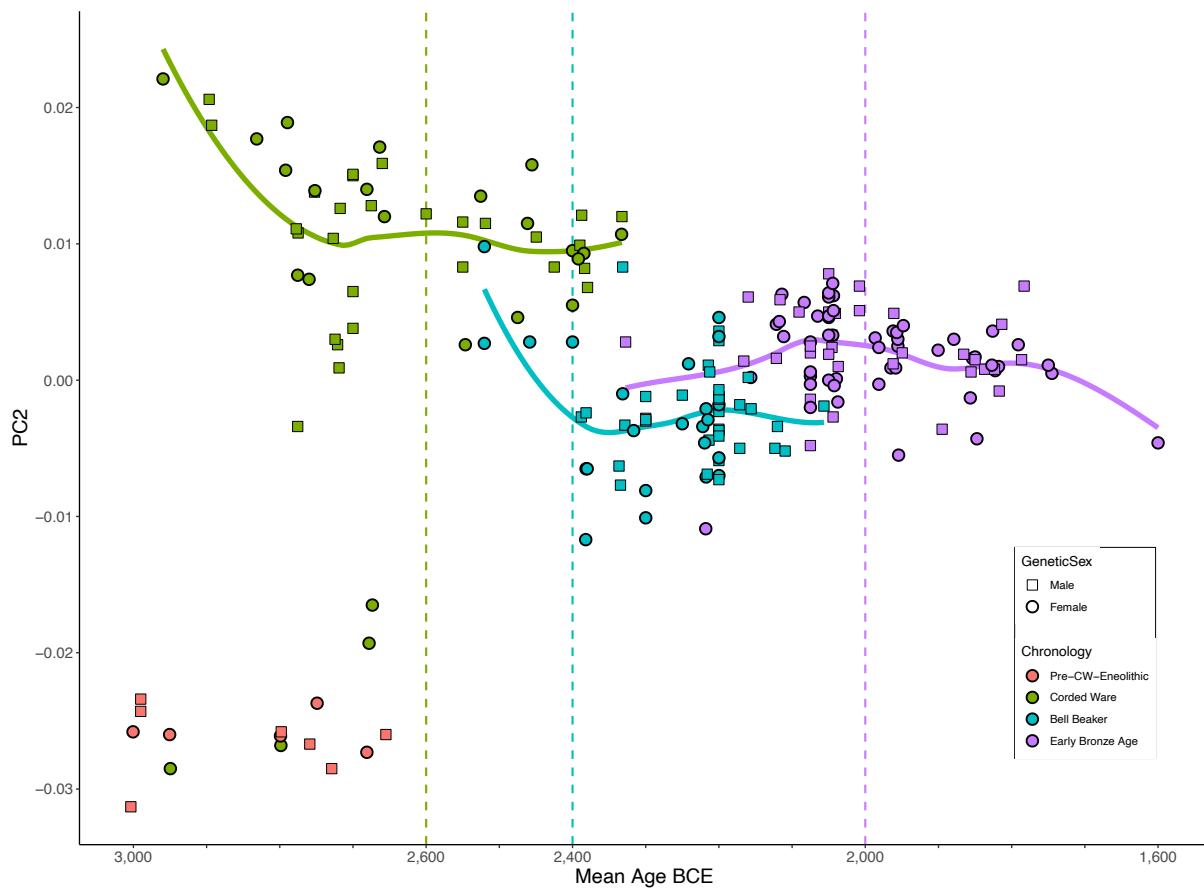
**Fig. S4. Bell Beaker sampled sites.** Site numbers correspond to site names listed above and in the site descriptions (Table S2). Green: Metropolitan area of Prague (capital city). Graphic M. Ernée, M. Dobeš.



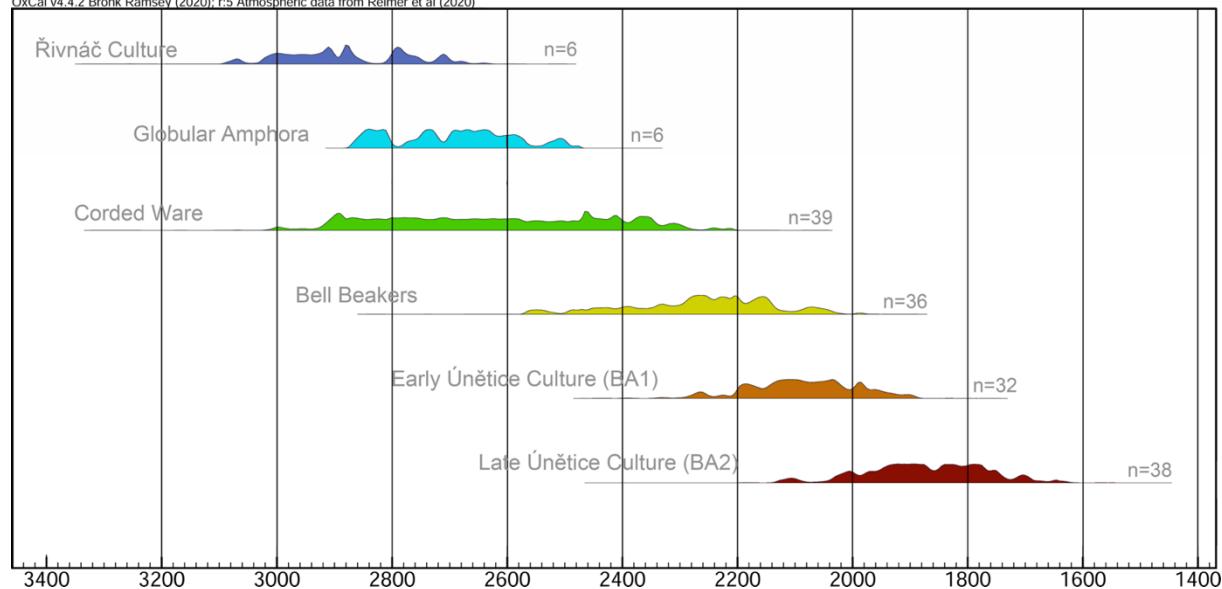
**Fig. S5. EBA sampled sites.** Site numbers correspond to site names listed above and in the site descriptions (Table S2). Green: Metropolitan area of Prague (capital city). Graphic M. Ernée, M. Dobeš.



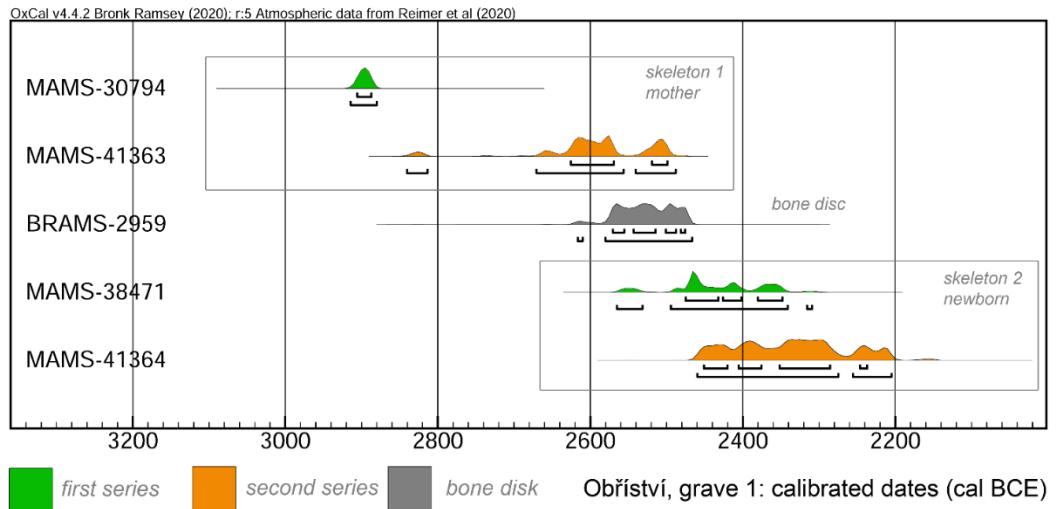
**Fig. S6. Ternary plot showing the percentage of ancestry of distal three-way models.** Using *qpAdm* each ancient Bohemian individual is modelled as a mixture of ancestry sources ascribable to Anatolia\_Neolithic and WHG (for individuals without “steppe” ancestry) and Anatolia\_Neolithic, WHG and Yamnaya\_Samara (for individuals with “steppe” ancestry). Shapes indicate sex of individual and colors indicate degree of model fits. List of outgroups and ancestry percentages are found in Table S9.



**Fig. S7. Temporal variation in PC2 with loess regression curves.** Colors indicate culture, and dashed vertical lines indicate grouping of cultures into early/late phases. Loess curves calculated independently for CW (excluding four CW females without steppe ancestry, green), BB (turquoise), and EBA (purple) cultural groups.



**Fig. S8. AMS 14C intervals.** Modelled intervals for Řivnáč, GAC, CW, BB and EBA early (pre-classical stages of the Únětice Culture) to EBA late (classical to post-classical phase of the Únětice Culture) AMS 14C data from Bohemia used in this paper. n = number of modelled radiocarbon dates. Graphic M. Langová.



**Fig. S9. Radiocarbon dates of the CW grave 1 from Obříství.** Graphic M. Langová.

**Table S1-S37. (separate Excel spreadsheet)**

Table S1: Chronology of archaeological cultures in Bohemia.

Table S2: Geographic and chronological information of published and newly reported sites.

Table S3: Contextual information, sequencing statistics and basic genetic results for all newly analyzed samples.

Table S4: Contextual and genetic overview of quality filtered ancient individuals from Bohemia analysed in this study.

Table S5: Contextual information for previously published samples used in analyses which appear in this publication.

Table S6: Summary table of newly reported (n=140) and previously published 14C dates.

Table S7: List of 1,141 modern West Eurasian individuals on which Principal Components Analysis was conducted.

Table S8: qpAdm modelling of each pre-CW individual from Bohemia as a two-way mixture of Anatolia\_Neolithic and a hunter-gatherer source.

Table S9: qpAdm modelling of ancient Bohemians as either three-way mixtures of Anatolia\_Neolithic, WHG and Yamnaya\_Samara (individuals with steppe ancestry) or Anatolia\_Neolithic and WHG (individuals without steppe ancestry i.e. pre-CW Eneolithic and Bohemia\_CW\_noSteppe).

Table S10: qpAdm modelling of each pre-CW cultural group in Bohemia as a three-way mixture of Anatolia\_Neolithic, Loschbour and Koros\_HG.

Table S11: DATES estimate of when hunter-gatherer ancestry was introgressed into each pre-CW cultural group in Bohemia.

Table S12: qpAdm modelling of Bohemia\_PE (Jordanow) and Bohemia\_EE (Funnelbeaker) as mixtures of Anatolia\_Neolithic and different hunter-gatherer sources.

Table S13: Testing clinality between Bohemia\_PE and Bohemia\_ME using qpWave.

Table S14: qpAdm modelling of Bohemia\_ME\_Rivnac and Bohemia\_ME\_GAC (Globular Amphora Culture) as mixtures of Anatolia\_Neolithic and different hunter-gatherer sources.

Table S15: Modelling Bohemia\_CW\_Early as a two-way mixture using proximal sources.

Table S16: qpAdm modelling Bohemia\_CW\_Early as a three-way mixture using distal sources.

Table S17: Modelling Bohemia\_CW\_Early using proximal sources.

Table S18: Modelling Bohemia\_CW\_Late using proximal sources.

Table S19: Modelling Germany\_Corded\_Ware using proximal sources.

Table S20: f4 statistics in the form of f4(Mbuti, CordedWare; Yamnaya, ancient northeast Europe).

Table S21: f4 statistics in the form of f4(Mbuti, ancient northeast Europe; Yamnaya, CordedWare).

Table S22: f4-statistics in the form of f4(W, X; Y, Z) showing that VLI009 and VLI079 carry significantly more hunter-gatherer ancestry than Bohemia\_ME groups.

Table S23: f4-statistics in the form f4(W, X; Y, Z) showing that Bohemia\_CW\_Late has significantly more Middle Eneolithic-like ancestry compared to Bohemia\_CW\_Early (without the early CW with no "steppe" ancestry).

Table S24: f4-statistics in the form f4(W, X; Y, Z) showing that Bohemia\_CW\_Late has equal amount of Middle Eneolithic-like ancestry as to Bohemia\_CW\_Early (when Bohemia\_CW\_Early includes the early CW females without "steppe" ancestry).

Table S25: qpAdm modelling of Bohemia\_CW\_Late as mixtures of Bohemia\_CW\_Early and a local pre-CW source.

Table S26: qpWave modelling of Bohemia\_CW\_Late as being cladal with Bohemia\_CW\_Early (including individuals without "steppe" ancestry).

Table S27: Pairwise Fst values between 3 highest and 3 lowest early CW on PC2 and between modern European populations.

Table S28: qpAdm modelling of Bohemia\_BB\_Early using proximal sources.

Table S29: f4-statistics in the form of f4(W, X; Y, Z) showing that Bohemia\_BB\_Late as significantly more Middle Eneolithic ancestry compared to Bohemia\_BB\_Early.

Table S30: qpAdm modelling of Bohemia\_BB\_Late as a two-way mixture of Bohemia\_BB\_Early and a local Middle Eneolithic source.

Table S31: f4-statistics in the form of f4(W, X; Y, Z) showing that Bohemia\_Uonetice\_preClassical carries significantly more non-local ancestry compared to Bohemia\_BB\_Late.

Table S32: Admixture f3 statistics in the form of f3(A, B; C).

Table S33: qpAdm modelling of Bohemia\_Uonetice\_preClassical using proximal sources.

Table S34: f4-statistics in the form of f4(W, X; Y, Z) showing that VLI051 is a significant outlier compared to all Bohemian cultural groups.

Table S35: Testing cladality between Bohemia\_Uonetice\_preClassical and Bohemia\_Uonetice\_Classical using qpWave.

Table S36: f4-statistic in the form of f4(W, X; Y, Z) showing that Bohemia\_Uonetice\_Classical carries significantly less EHG and Yamnaya-like ancestry and more Neolithic-like ancestry.

Table S37: qpAdm modelling of Bohemia\_Uonetice\_Classical as a two-way mixture of Bohemia\_Uonetice\_preClassical and a local Middle Eneolithic source.

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