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USE OF WOOD IN YAMPIL BARROW COMPLEX FUNERARY RITUALS IV-II MILL. BC

ABSTRACT

This article presents the results of analyses of relics made out of wood that were discovered during the investigation of the *Yampil Barrow Complex* (Ukraine, Vinnitsa *Oblast*) in the period 2010-2015 in respect to the graves of Eneolithic communities, Yamnaya culture, Catacomb culture, Noua culture and the Iron Age. The research has documented a process of the selection of wood used in funerary rituals in the 4th to 2nd mill. BC and the choice of tree species present in stenothermal climax forests (*Quercus* sp., *Fraxinus* sp.).

Key words: kurgan cultures, Late Eneolithic, Early Bronze Age, Middle Dniester Area, wood, charcoal

This article aims to present the research results of wood relics unveiled during investigation of the *Yampil Barrow Complex* in 2010-2015 and advance arguments of interpretation in respect to three matters: (a) reference to hitherto knowledge on the creators and users of Dniester Region ritual centres in the IV-II millennium BC, (b) the context of correspondingly chronological barrow complexes from the Pontic forest-steppe and steppe and (c) the broader context of Indo-European communities.

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1. SOURCES, METHODS AND RESEARCH RESULTS

Some 89 samples of organic substance (wood, charcoal and others), were taken during exploration of barrows in the following: Klembivka, barrow 1 (2 samples), Pidlisivka, barrow 1 (8 samples), Porohy, barrow 3A (24 samples), Prydnistryanske, site 1, four barrows (barrow I – 13 samples, barrow II – 6 samples, barrow III – 1 sample, barrow IV – 35 samples). The samples were gained by manual extraction of carbon or wood fragment visible in the profile or in the layer. The loci of sample extraction are marked on Figs. 1-13.

Dr. Tomasz Stępnik identified the contents of the samples under study and the details of analysis can be seen in Tab. 1.

The main research method in respect to charcoal was the observation of fractures under a binocular magnifying glass in reflected light according to various magnifications. The main information usually was gained from the cross section, while for the purposes of the analysis of wood microscopic preparations were made for observation in passing light. So as to gain a reasonable picture various magnifications were made, depending on the sample, most often around 200 times. The preparations were made out of all three sections: transverse, contiguous and radial.

The state of preservation of organic material in the samples was differentiated, which saw proof in the research results. Thus identification of 66 samples was possible at the level of tree species. In the case of 10 samples only a description of their contents was possible in general terms of deciduous wood probably of diffuse-porous origin, while a further 12 samples contained material in a state that did not make identification possible – in one sample it should be noted an organic substance was found other than wood or bark.

In respect of chronology, the majority, as many as 57 samples, had their origin in objects relating to the peoples of the Yamnaya culture (YC), 16 in objects dated to the Late Eneolithic (including 10 qualified to the Gordineşti group of the Late Tripolye culture), 9 from objects dated to the Sarmatian period, 3 from objects of the Noua culture (NC) and 2 from objects of the Catacomb culture (CC). One sample has its origin in an object with chronology dated to modern times and another represents a phase predating the construction of the barrow at site Porohy 3A.

In terms of function these objects are respectively graves, containing 76 samples, hearth (6 samples), pits (3 samples), pit or hearth (1 sample), ritual pit (1 sample) and an excavation dated to modern times (1 sample). Here, one sample was taken under the barrow fill.

In summarising the data presented in Tab. 1 one should note the low level of taxonomic differentiation of the wood under analysis. After eliminating one of the samples, and unidentified organic material (Tab. 1, no. 39), it can be seen that among the remaining 88 samples studied there dominates oak, *Quercus* sp., which was found in 51 samples (58% of all) and noted in all seven barrows. In 15 samples

Table 1

Klembivka, Pidlisivka, Porohy and Prydnistryanske. List of samples and results of wood identification

Site	Barrow	Feature	Function	Sample no.	Location in the feature	Content	Taxonomic identification	Chronology	Figure
Klembivka	1	4	ritual pit	2	ceiling	charcoal (8 fragments)	oak *Quercus* sp.	Eneolithic	–
Klembivka	1	5	grave	43	inside the human skull	charcoal (2 fragments)	decidous	Eneolithic	–
Pidlisivka	1	1Aa	grave	1	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 1: 1-3
Pidlisivka	1	1B	grave	27	roofing	wood	oak *Quercus* sp.	Eneolithic	Fig. 2
Pidlisivka	1	1B	grave	28	roofing	wood	oak *Quercus* sp.	Eneolithic	Fig. 2
Pidlisivka	1	1B	grave	33	roofing	wood	oak *Quercus* sp.	Eneolithic	Fig. 2
Pidlisivka	1	1B	grave	34	roofing	wood	oak *Quercus* sp.	Eneolithic	Fig. 2
Pidlisivka	1	2	trench	2	ceiling	wood	decidous	modern times	–
Pidlisivka	1	4	grave	3	E wall	wood	decidous	Catacomb c.?	–
Pidlisivka	1	11	grave	46	ceiling	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 1: 4
Porohy	3A	1	grave	2	W part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3
Porohy	3A	1	grave	9	roofing, NE part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3
Porohy	3A	1	grave	19	roofing, NE part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3
Porohy	3A	1	grave	20	roofing, E part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3
Porohy	3A	1	grave	22	roofing, E part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3
Porohy	3A	1	grave	24	N part of wall boarding	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3

Site	Barrow	Feature	Function	Sample no.	Location in the feature	Content	Taxonomic identification	Chronology	Figure
Porohy	3A	1	grave	35	N part of wall boarding	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 3
Porohy	3A	3	grave	8	ceiling	wood	oak *Quercus* sp.	Noua c.	–
Porohy	3A	5	grave	5	W part of a ceiling	wood	oak *Quercus* sp.	Noua c.	Fig. 4: 1-2
Porohy	3A	7	grave	14	SE part	wood	undefined, de-structed	Noua c.	–
Porohy	3A	10	grave	28	roofing, NW part	wood	deciduous diffuse-porous	Yamnaya c.	Fig. 4: 3-5
Porohy	3A	11	grave	18	inside a grave pit	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 5: 1-2
Porohy	3A	11	grave	30	roofing, NE part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 5: 1-2
Porohy	3A	12	grave	36	roofing, W part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 5: 3-4
Porohy	3A	12	grave	37	roofing, W part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 5: 3-4
Porohy	3A	15	grave	38	roofing, NE part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 6: 1-3
Porohy	3A	15	grave	47	roofing, N part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 6: 1-3
Porohy	3A	15	grave	55	roofing, S part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 6: 1-3
Porohy	3A	16	pit or hearth	54	bottom	wood	undefined, destructed	Yamnaya c.?	–
Porohy	3A	20	grave	57	central part	wood	undefined, destructed	Yamnaya c.	Fig. 6: 4-7
Porohy	3A	20	grave	58	central part	wood	undefined, destructed	Yamnaya c.	Fig. 6: 4-7
Porohy	3A	20	grave	62	E part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 6: 4-7

Site	Barrow	Feature	Function	Sample no.	Location in the feature	Content	Taxonomic identification	Chronology	Figure
Porohy	3A	20	grave	63	N part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 6: 4-7
Porohy	3A	–	–	53	–	wood	oak *Quercus* sp.	before the Eneolithic mound	–
Prydnistryanske	I	1	pit	71	bottom	wood	deciduous, destructed	Tripolye c. – Gordineşti g.	Fig. 7: 1-4
Prydnistryanske	I	1	pit	72	bottom	wood	oak *Quercus* sp.	Tripolye c. – Gordineşti g.	Fig. 7: 1-4
Prydnistryanske	I	1	pit	73	bottom	wood	undefined destructed	Tripolye c. – Gordineşti g.	Fig. 7: 1-4
Prydnistryanske	I	2	grave?	5	roofing, SW part	wood	undefined, destructed	Sarmatian period	–
Prydnistryanske	I	2	grave?	74		unidentified organic material		Sarmatian period	–
Prydnistryanske	I	2	grave?	76	roofing, SE part	wood	oak *Quercus* sp.	Sarmatian period	–
Prydnistryanske	I	2	grave?	77	bottom, SW part	wood	undefined, destructed	Sarmatian period	–
Prydnistryanske	I	2	grave?	78	roofing, SE part	wood	oak *Quercus* sp.	Sarmatian period	–
Prydnistryanske	I	3	grave?	17/1	N part	wood	oak *Quercus* sp.	Sarmatian period	–
Prydnistryanske	I	3	grave?	17/2	N part	wood	oak *Quercus* sp.	Sarmatian period	–
Prydnistryanske	I	3	grave?	18/1	S part	wood	undefined, destructed	Sarmatian period	–
Prydnistryanske	I	3	grave?	18/2	S part	wood	undefined, destructed	Sarmatian period	–

Site	Barrow	Feature	Function	Sample no.	Location in the feature	Content	Taxonomic identification	Chronology	Figure
Prydnistryanske	I	4	grave	79	inside a stone mace	wood	deciduous diffuse-porous	Catacomb c.	Fig. 7: 5-8
Prydnistryanske	II	1	hearth	1		charcoal	deciduoud, destructed	Tripolye c. – Gordineşti g.	–
Prydnistryanske	II	1	hearth	2		charcoal	oak *Quercus* sp.	Tripolye c. – Gordineşti g.	–
Prydnistryanske	II	1	hearth	3		charcoal	oak *Quercus* sp.	Tripolye c. – Gordineşti g.	–
Prydnistryanske	II	1	hearth	4		charcoal	oak *Quercus* sp.	Tripolye c. – Gordineşti g.	–
Prydnistryanske	II	1	hearth	6		charcoal	deciduoud, destructed	Tripolye c. – Gordineşti g.	–
Prydnistryanske	II	1	hearth	49		charcoal	deciduoud, destructed	Tripolye c. – Gordineşti g.	–
Prydnistryanske	III	3	grave	7	central part	wood	deciduous diffuse-porous?), destructed	Tripolye c. – Gordineşti g.	Fig. 8
Prydnistryanske	IV	4	grave	19	SW part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	20	SW part	wood (4 fragments)	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	21	W part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	22/1	SW part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	22/2	SW part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	23	SW part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	25	SW part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10

Site	Barrow	Feature	Function	Sample no.	Location in the feature	Content	Taxonomic identification	Chronology	Figure
Prydnistryanske	IV	4	grave	26	S part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	27/1	central part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	27/2	central part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	28	central part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	29/1	central part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	29/2	central part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	30	E part	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	31	E part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	35	upper part	charcoal	undefined	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	4	grave	89	SE part	wood	ash *Fraxinus* sp.	Yamnaya c.	Fig. 9 – 10
Prydnistryanske	IV	6	grave	50	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11
Prydnistryanske	IV	6	grave	53	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11
Prydnistryanske	IV	6	grave	54	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11
Prydnistryanske	IV	6	grave	55/1	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11
Prydnistryanske	IV	6	grave	55/2	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11
Prydnistryanske	IV	6	grave	55/3	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11

Site	Barrow	Feature	Function	Sample no.	Location in the feature	Content	Taxonomic identification	Chronology	Figure
Prydnistryanske	IV	6	grave	56	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 11
Prydnistryanske	IV	8	grave	51	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	52	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	57	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	58	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	59	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	64	roofing	wood	undefined, destructed	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	94	under a human skull	wood	undefined, destructed	Yamnaya c.	Fig. 12
Prydnistryanske	IV	8	grave	96	on a human skull	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 12
Prydnistryanske	IV	9	grave	66	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 13
Prydnistryanske	IV	9	grave	67	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 13
Prydnistryanske	IV	9	grave	69	roofing	wood	oak *Quercus* sp.	Yamnaya c.	Fig. 13

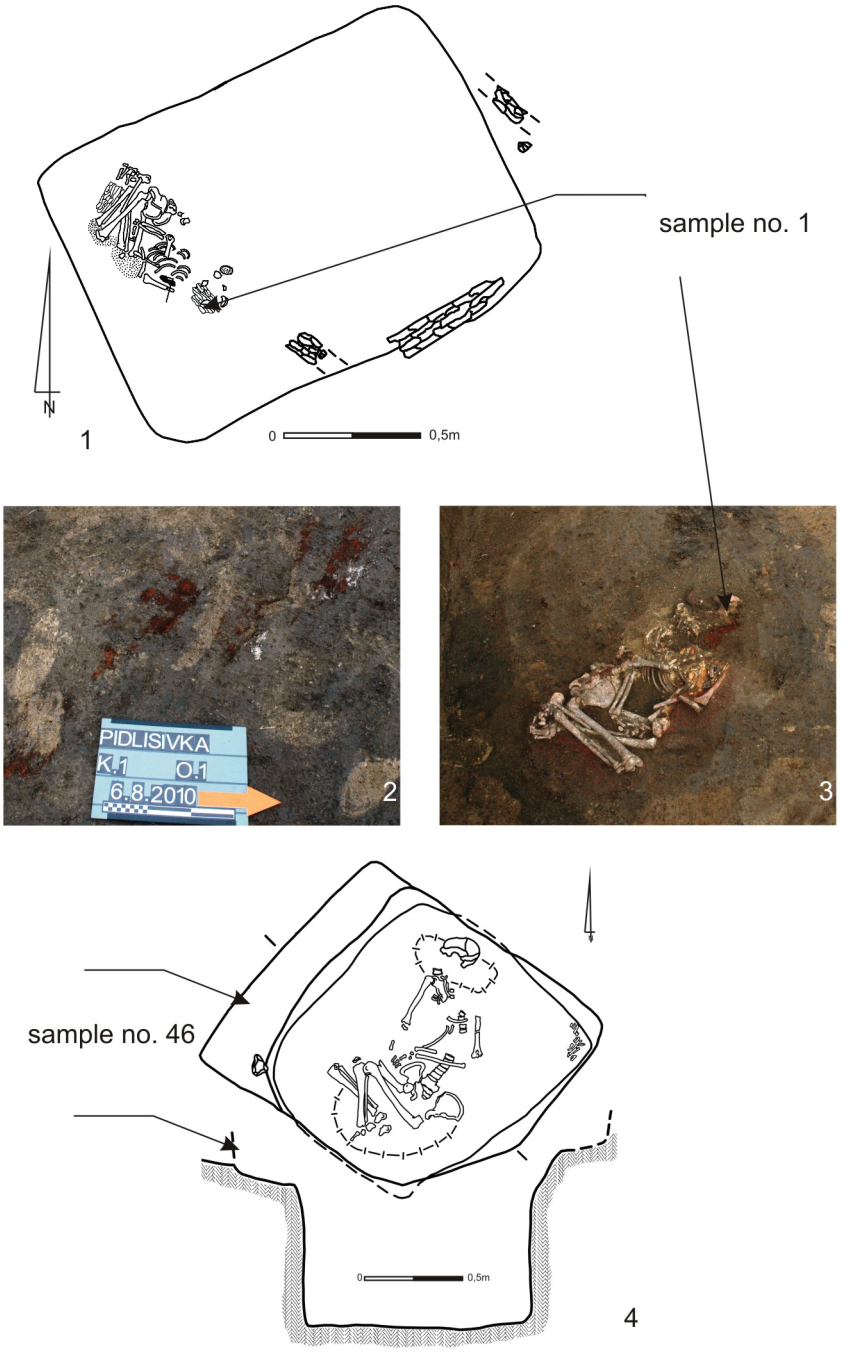

Fig. 1. Pidlisivka, Yampil Region, barrow 1. Location of samples: 1-3 – feature 1Aa; 4 – feature 11. Prep. by D. Żurkiewicz

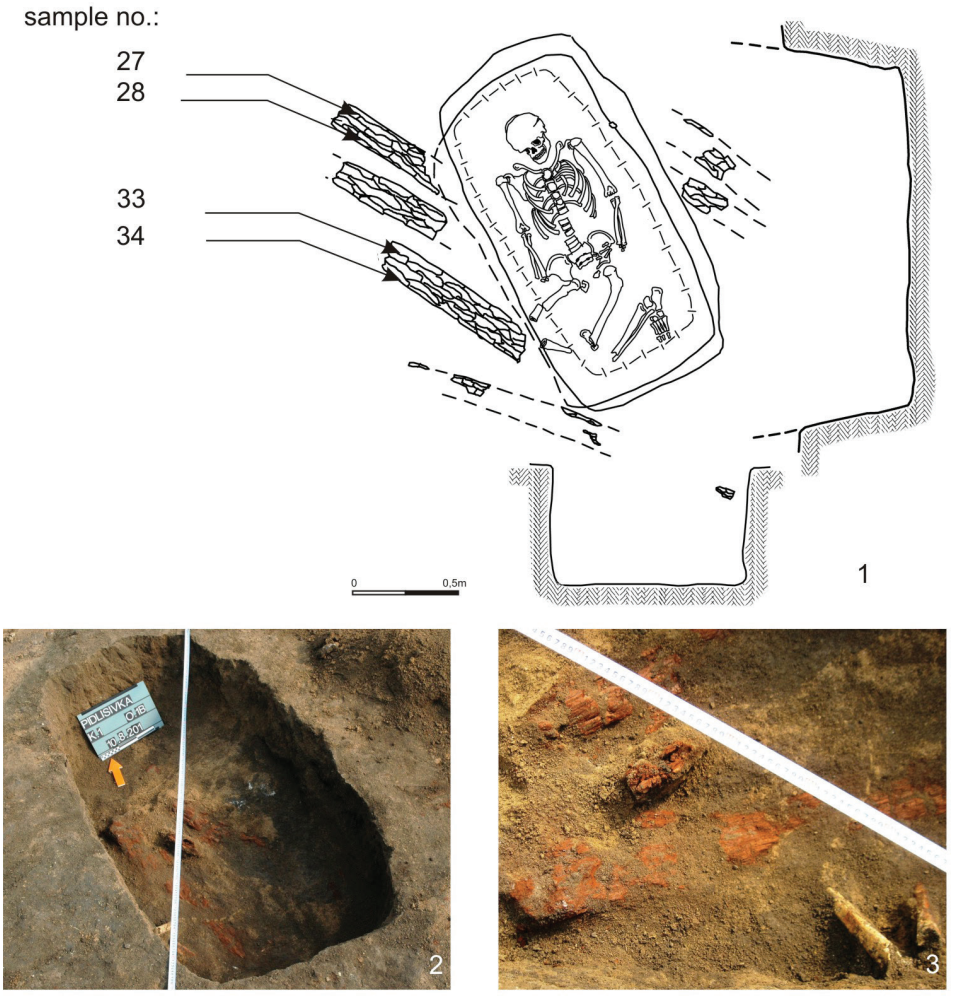

Fig. 2. Pidlisivka, Yampil Region, barrow 1/feature 1B. Location of samples. Prep. by D. Żurkiewicz

(17%) ash wood was identified, *Fraxinus* sp. – though this species occurred only in one barrow and one object, Prydnistryanske barrow IV/feature 4. In a further 10 samples (11%) deciduous wood was identified (diffuse-porous) and – as mentioned above – the identification of the contents of 12 samples was not possible on account of the high level of destruction of their material.

2. INTERPRETATION OF WOOD RELICS IN FEATURES DATED TO THE IV-II MILL. BC

The basis for the interpretation of recorded data for objects dated to the IV-II millennium BC, is the formulation of an appropriate archaeological context of the samples under analysis. For this purpose data from taxonomic and archaeometric analysis is used as well as that of stratigraphic and planimetric, on the basis of sources in the professional literature.

Klembivka barrow 1/feature 4 (further as Klembivka 1/4). A pit, probably ritual, dated to the Late Eneolithic [Klochko *et al*. 2015c: 153-154]. Oak charcoals (sample no. 2) seem to be relics of probable human ritual activity as a result of using fire before the deposition of parts of roe deer into the pit.

Klembivka barrow 1/feature 5. A grave formed by the Late Eneolithic community. Human bone from the grave dated by ^{14}C to 4225±35 BP (Poz-70670) [Goslar *et al*. 2015, Tab. 4; Klochko *et al*. 2015c: 154-155 and Fig. 12]). Charcoals from deciduous wood (sample no. 43) that have been recorded inside the human skull could be a natural and random admixture in the soil that filled the grave pit.

Pidlisivka barrow 1/feature 1A (Fig. 1: 1-3). Probably a central grave of the second (younger) mound built by the Yamnaya culture community [Kośko, Razumow, Żurkiewicz 2014: 214-219; Klochko *et al*. 2015a: 47-49]. Two stratigraphically differentiated human burials have been deposited in two phases: first the lower, no. 1A (male of 30-40 years) and then upper, no. 1Aa (child aged 7-8 years). There are six ^{14}C datings for the grave [*see* discussion in Goslar, Kośko, Razumow 2014: 305-309; Goslar *et al*. 2015: 257-259]. Three such were made for the older burial 1A: 3720±60 BP (Kiev-16673, human bone), 3895±70 BP (Kiev-16892, human bone), 4082±35 BP (Poz-52424, wood). The next three datings refer to the younger burial no. 1Aa: 4195±35 BP (Poz-38529, human bone), 4080±40 BP (Poz-39214, human bone), 4190±35 BP (Poz-52423, wood). The oak wood (sample no. 1) contained part of a plank from the roofing of the younger grave 1Aa.

Pidlisivka barrow 1/feature 1B (Fig. 2). Probably a central grave of the first (older) mound built most likely by the Late Eneolithic circle [Klochko *et al*. 2015a: 49-51].[1] Human bone from the grave gave a ^{14}C dating of 3680±90 BP (Kiev-16674) [*see* discussion in Goslar, Kośko, Razumow 2014: 305-309; Goslar *et al*. 2015: 257-259]. Four oak wood samples were taken from the remains of two planks from the grave roofing: nos. 27 and 28 from the central plank, nos. 33 and 34 from the south-western plank. The planks were placed at an angle or along the longer axis of the grave.

[1] For an earlier interpretation linking the grave with the YC community *see*: Kośko, Razumow, Żurkiewicz 2014: 219-222.

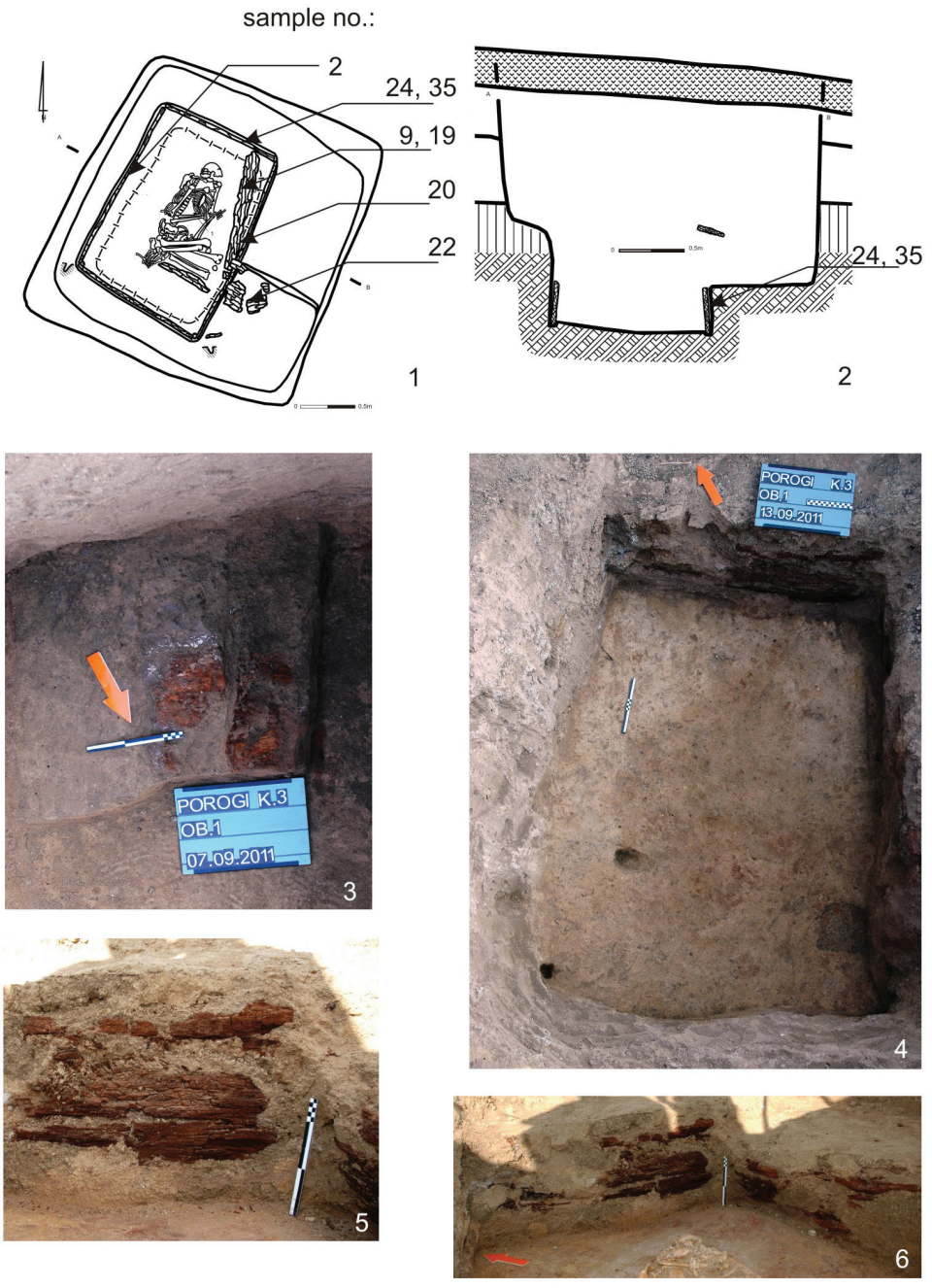

Fig. 3. Porohy, Yampil Region, barrow 3A/feature 1. Location of samples. Prep. by D. Żurkiewicz

Pidlisivka barrow 1/feature 4. A human grave that can be dated probably to the CC [Klochko *et al*. 2015a: 52-53].[2] There is a ^{14}C dating of human bone of 3810±80 BP (Kiev-16675). Deciduous wood (sample no. 3) has been taken form a plank recorded at the eastern wall of the grave pit. This might have been the remains of grave roofing.[3]

Pidlisivka barrow 1/feature 11 (Fig. 1: 4). A human grave dated to the YC [Kośko, Razumow, Żurkiewicz 2014: 232-234; Klochko *et al*. 2015a: 62-64]. There are two radiocarbon datings of human bones: 3690±80 BP (Kiev-16676), and 4085±30 BP (Poz-81793) [Goslar *et al*. 2015, Tab. 1]. Wood of oak (sample no. 46) has been recorded in the ceiling part of the grave pit. Most probably this is the remainder of the wooden grave cover located on the step, 0.70 m above the bottom of the pit. Roofing elements were laid transversely in relation to the grave axis.

Porohy barrow 3A/feature 1 (Fig. 3). A human grave of the YC [Klochko *et al*. 2015b: 85-89]. Three ^{14}C datings of human bones were made: 3770±170 BP (Kiev-17384), 4430±70 BP (Kiev-17437), 3760±35 BP (Poz-70668) [Goslar *et al*. 2015: 270-274]. Seven samples have been recorded in various parts of the grave fill. Five such (nos. 2, 9, 19, 20, 22) contained oak wood planks used for the grave cover. Elements of the roofing were placed along the longer axis of the grave. Two samples (nos. 24, 35), also of oak wood, came from the boarding of the north wall.

Porohy barrow 3A/feature 3. A human grave belonged to the NC [Klochko *et al*. 2015b: 94-95]. Oak wood (sample no. 8) has been recorded in the ceiling part of the grave pit and came from the grave cover. Elements of roofing were placed transversely in relation to the longer axis of the grave.

Porohy barrow 3A/feature 5 (Fig. 4: 1-2). A human grave that belonged to the NC [Klochko *et al*. 2015b: 95-96]. There is a ^{14}C dating of human bones: 3200±90 BP (Kiev-17440). A sample (no. 5) came from the western part of the pit and contained a fragment of an oak plank from a grave cover. Elements of roofing were placed along the longer axis of the grave.

Porohy barrow 3A/feature 7. A human grave that belonged to the NC [Klochko *et al*. 2015b: 98-99]. The ^{14}C dating of human bone is recorded at 4115±35 BP (Poz-70667). A sample (no. 14) was taken in the south-eastern part of the pit and contained a plank made of unidentified wood. Elements of roofing were placed transversely in relation to the longer axis of the grave.[4]

Porohy barrow 3A/feature 10 (Fig. 4: 3-5). A grave of the YC [Klochko *et al*. 2015b: 101-104] that produced five ^{14}C datings of human bones: 3860±160 BP (Kiev-17383), 4370±70 BP (Kiev-17438), 4070±50 BP (Kiev-18928), 4105±35 BP (Poz-74393), 4040±35 BP (Poz-81824). This sample (no. 28) contained decidu-

[2] For earlier considerations *see*: Kośko, Razumow, Żurkiewicz 2014: 222.

[3] Please note that in an earlier publication *Quercus* sp. was mistakenly used here [Kośko, Razumow, Żurkiewicz 2014: 222].

[4] In an earlier publication it was mistakenly written that the remains of wooden roofing were placed in the south-western part of the grave pit [Klochko *et al*. 2015b: 98].

Fig. 4. Porohy, Yampil Region, barrow 3A. Location of samples: 1-2 – feature 5; 3-5 – feature 10. Prep. by D. Żurkiewicz

ous diffuse-porous wood, out of which a plank forming a grave cover was made. Elements of roofing were placed transversely in relation to the longer axis of the grave.

Porohy barrow 3A/feature 11 (Fig. 5: 1-2). The next grave belonging to the YC [Klochko *et al*. 2015b: 105-107] provided a ^{14}C dating of human bones of

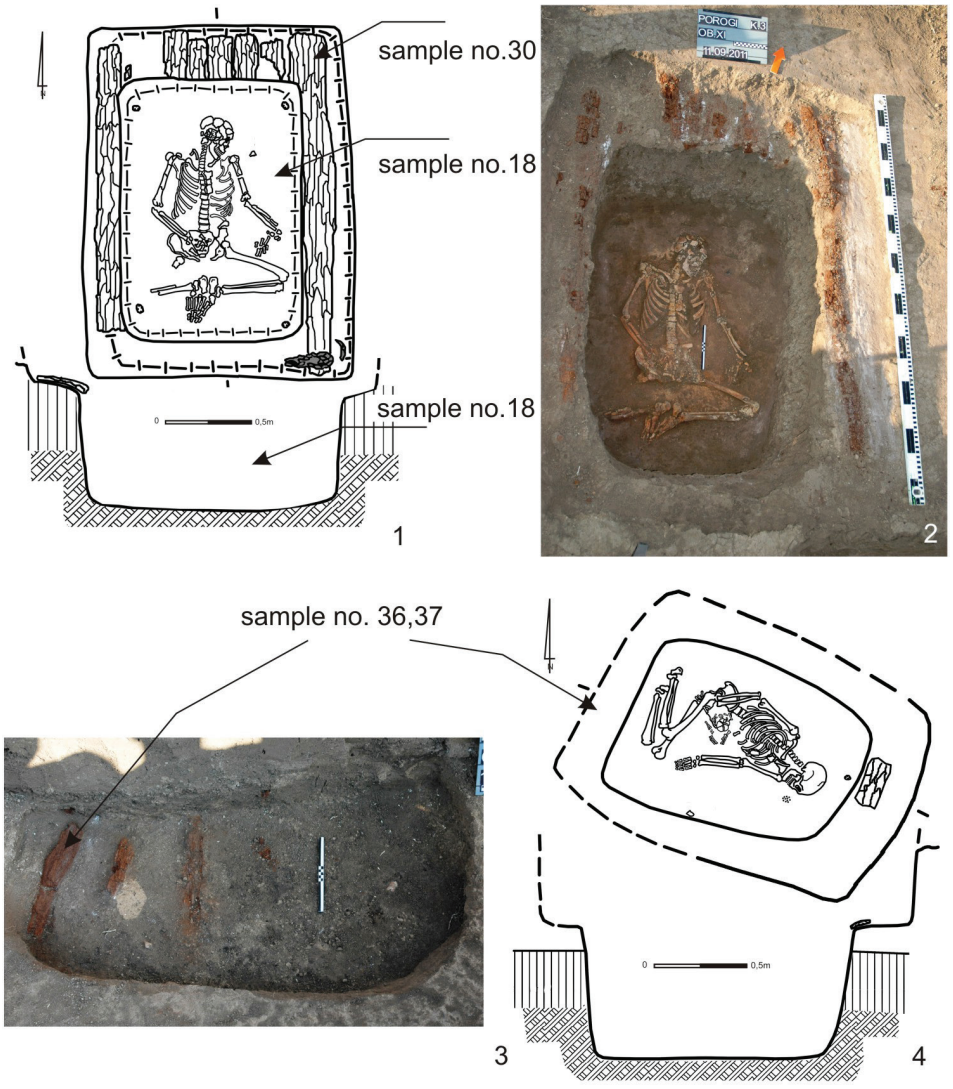

Fig. 5. Porohy, Yampil Region, barrow 3A. Location of samples: 1-2 – feature 11; 3-4 – feature 12. Prep. by D. Żurkiewicz

4075±35 BP (Poz-47741). Two samples have been taken: no. 18 in the fill of the grave pit and no. 30 from the grave cover in the north-eastern part. In both cases oak was identified – from the cover of the grave. Elements of roofing were placed along the longer axis of the grave.

Porohy barrow 3A/feature 12 (Fig. 5: 3-4). A grave of the YC [Klochko *et al.* 2015b: 108-110] that produced a ^{14}C dating of human bones of 3985±35 BP (Poz-

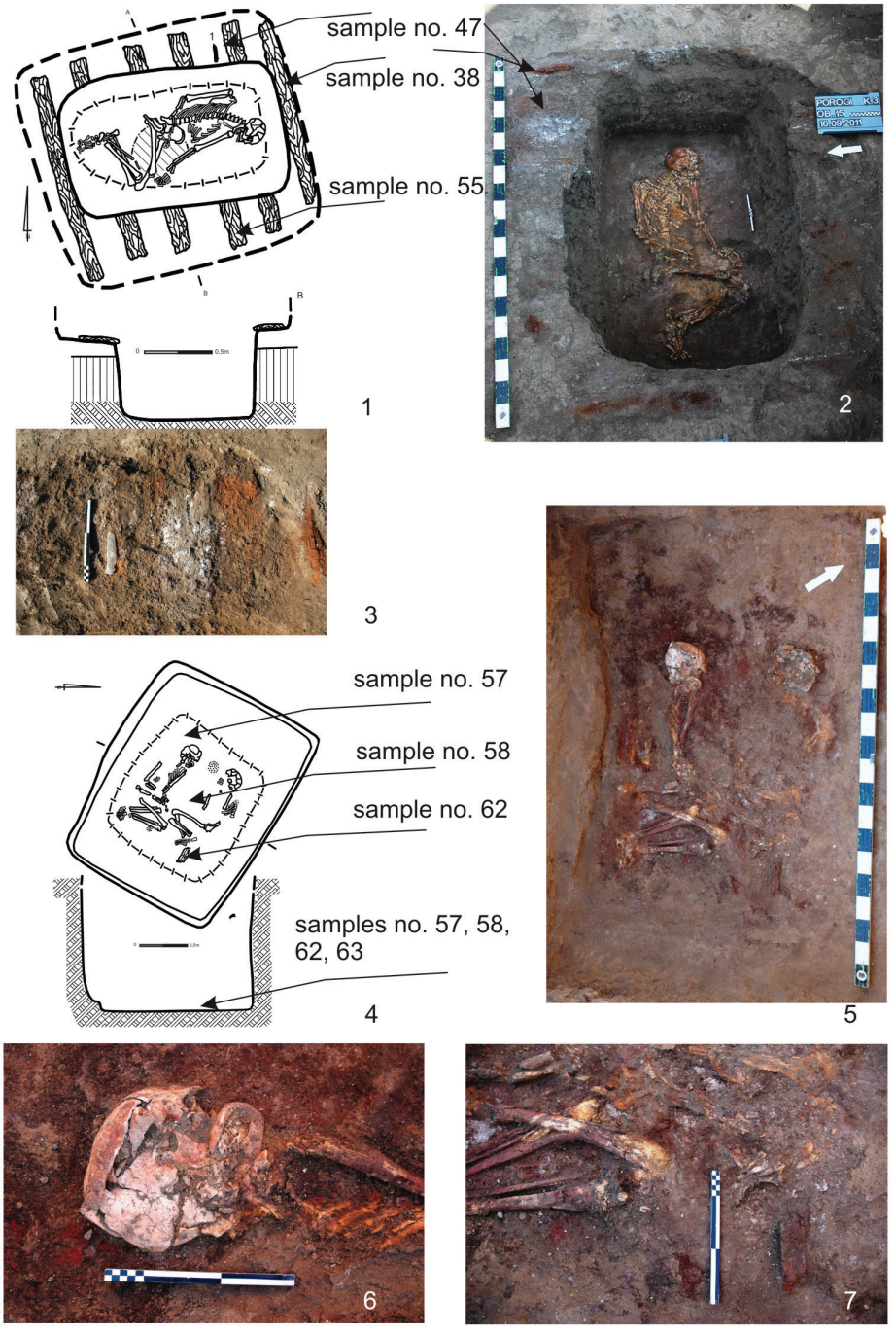

Fig. 6. Porohy, Yampil Region, barrow 3A. Location of samples: 1-3 – feature 15; 4-7 – feature 20. Prep. by D. Żurkiewicz

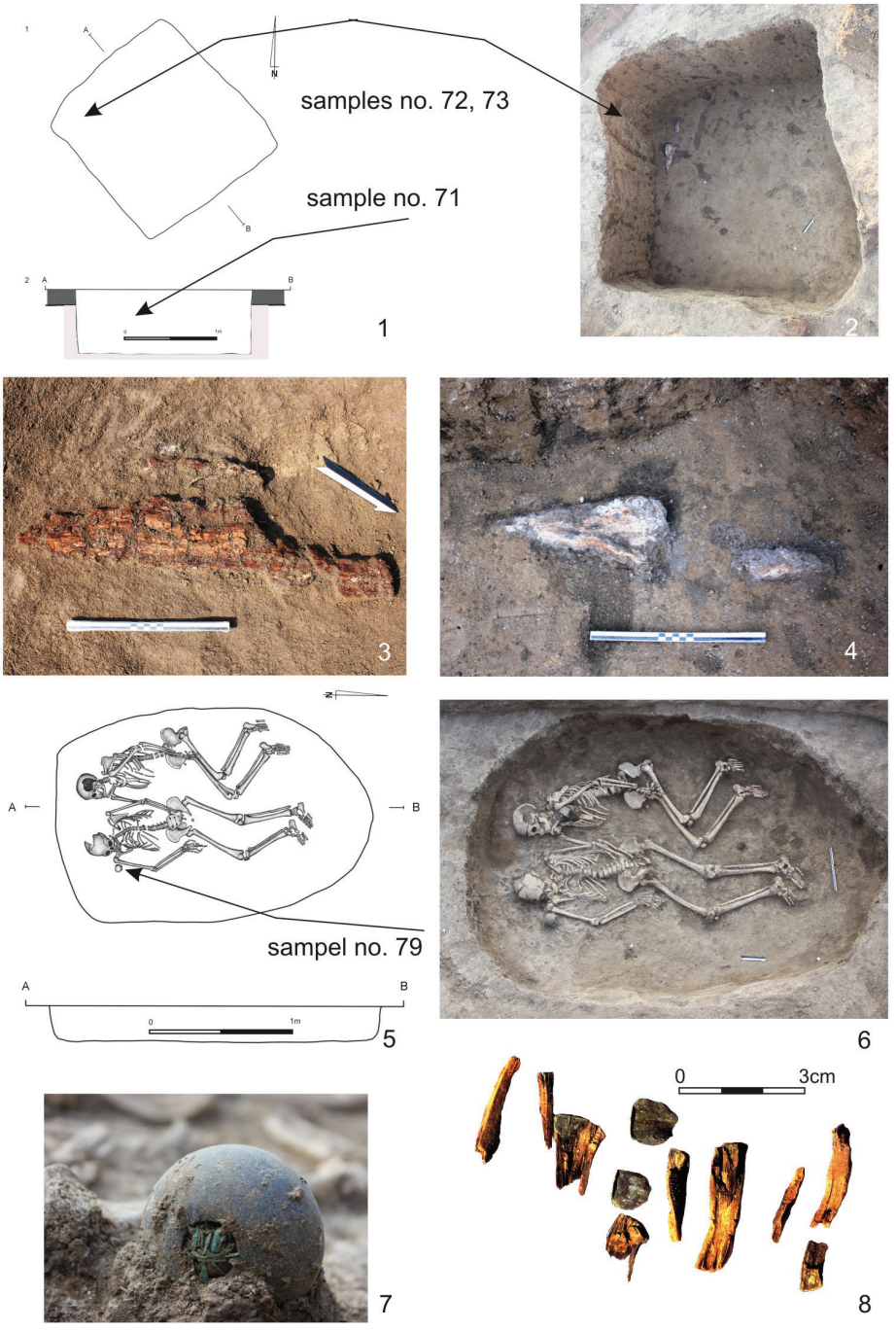

Fig. 7. Prydnistryanske, Yampil Region, barrow I. Location of samples: 1-4 – pit 1; 5-8 – feature 4. Prep. by D. Żurkiewicz

47742). Both samples (nos. 36 and 37) document the use of oak in the production of planks for the grave cover. Elements of roofing were placed transversely in relation to the longer axis of the grave.

Porohy barrow 3A/feature 15 (Fig. 6: 1-3). A grave of the YC [Klochko *et al*. 2015b: 112-115]. There are two ^{14}C datings of human bones: 3580±90 BP (Kiev-17386), 4010±220 BP (Kiev-17386). Three samples (nos. 38, 47 and 55) document the use of oak in the production of planks for the grave cover. Elements of roofing were placed transversely in relation to the longer axis of the grave.

Porohy barrow 3A/feature 16. This was an unidentified feature – pit or hearth of uncertain chronology (perhaps YC) [Klochko *et al*. 2015b: 115-116]. At the bottom of the object there lay fragments of planks made of unidentified wood. One of them was recorded in sample no. 54.

Porohy barrow 3A/feature 20 (Fig. 6: 4-7). From a human grave of the YC [Klochko *et al*. 2015b: 124-126] there were three ^{14}C datings of human bones: 3820±80 BP (Kiev-17385), 4175±35 BP (Poz-74397), 4190±35 BP (Poz-47744). Four samples were taken in various parts of the grave fill. Two such (nos. 57 and 58) contained unidentified wood and in the next two (nos. 62 and 63) oak wood was found. In every case these are the remains of a cover that fell into the grave pit fill. Elements of roofing were placed along the longer axis of the grave.

Porohy barrow 3A. From the original land level comes sample no. 53, containing oak wood.

Prydnistryanske barrow I/feature 1 (Fig. 7: 1-4). A pit linked to the Gordineşti group of the Late Tripolye culture [Klochko *et al*. 2015d: 189-192]. From two ^{14}C datings of wood one is unreliable (13390±70 BP, Poz-66235) [Goslar *et al*. 2015, Tab. 1] and the second is acceptable: 4700±70 BP (Poz-66214). Three samples were taken in various parts of the fill. They contained deciduous wood (no. 71), a structural element from an oak trunk or a branch (no. 72) and unidentified with remains of lime (?, no. 73). These might be parts of the cover, placed along the longer axis of the object.

Prydnistryanske barrow I/feature 4 (Fig. 7: 5-8). This grave contained two human burials and is linked to the CC [Klochko *et al*. 2015d: 192-195] and has four ^{14}C datings: 4190±80 BP (Poz-66218; wood), 4070±35 BP (Poz-66219; human bone from burial no. 1), 3940±40 BP (Poz-66220; human bone from burial no. 2), 3940±40 BP (Poz-66732; human bone from burial no. 2). Sample (no. 79) contained wood found inside a stone mace, being the remains of a handle made from the branches of deciduous diffuse-porous wood.

Prydnistryanske barrow II/feature 1. A hearth dated to the Gordineşti group of the Late Tripolye culture [Klochko *et al*. 2015d: 197] that is confirmed by a ^{14}C dating of charcoal: 4485±30 BP (Poz-66221). Six samples document the use of oak as firewood (nos. 2, 3, 4) or in general deciduous wood (nos. 1, 6, 49).

Prydnistryanske barrow III/feature 3 (Fig. 8). This human grave is linked to the Gordineşti group of the Late Tripolye culture [Klochko *et al*. 2015d: 207-213]

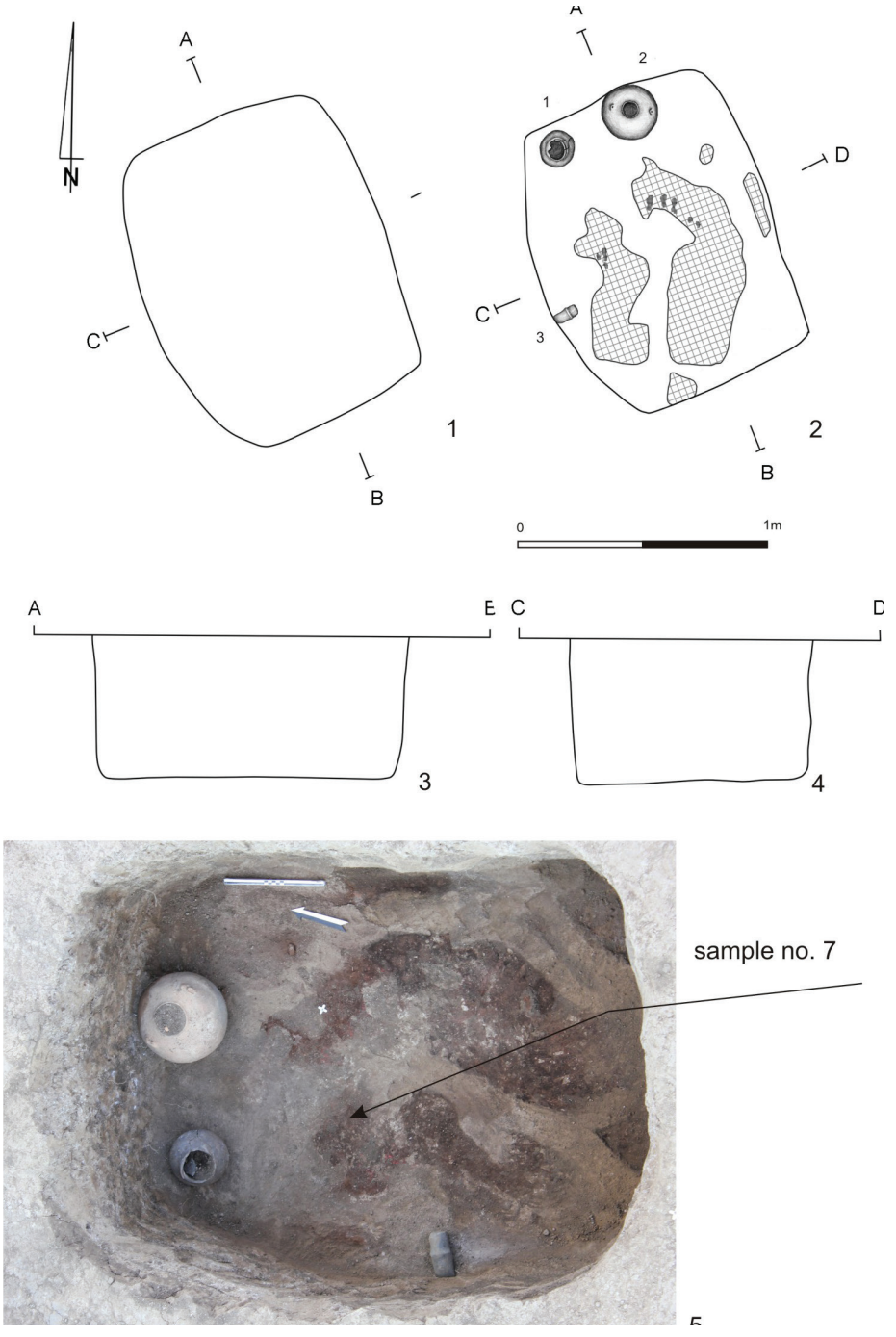

Fig. 8. Prydnistryanske, Yampil Region, barrow III/feature 3. Location of samples. Prep. by D. Żurkiewicz

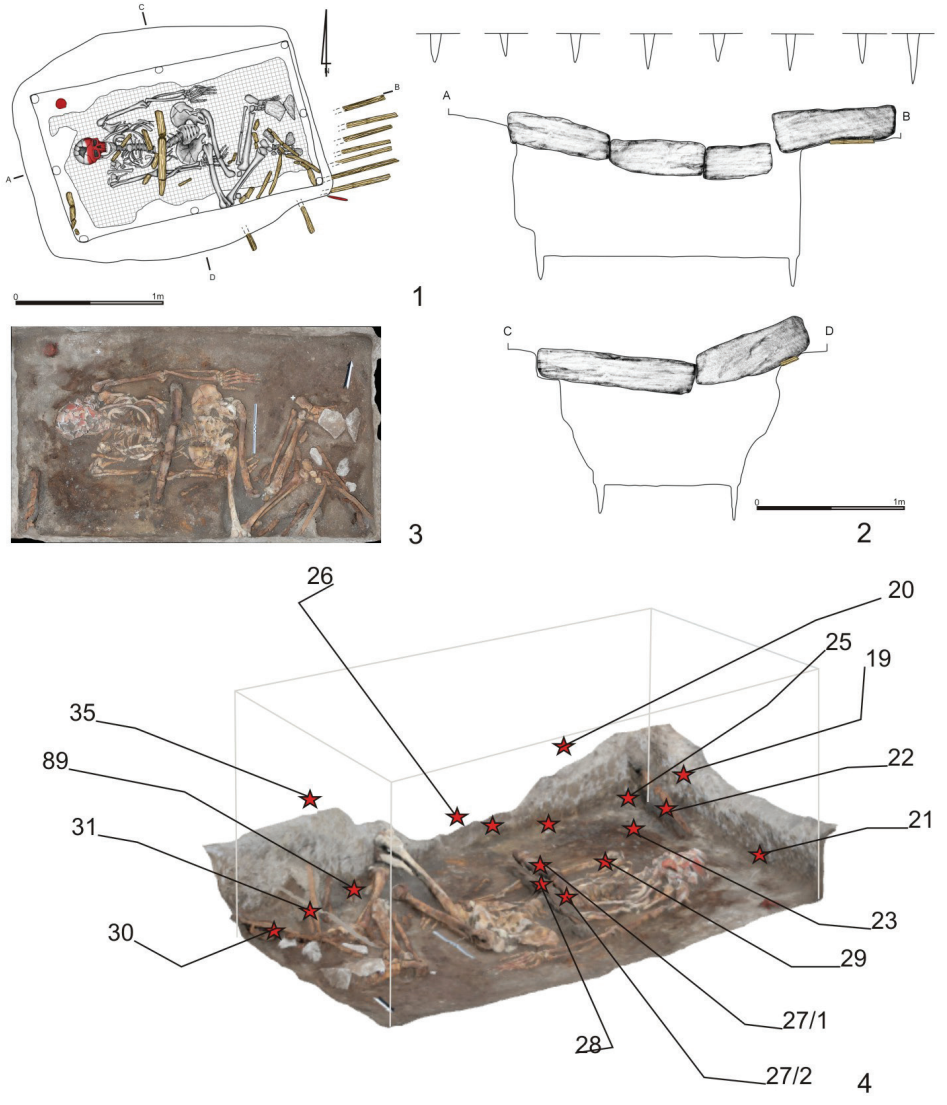

Fig. 9. Prydnistryanske, Yampil Region, barrow IV/feature 4. Location of samples. Prep. by D. Żurkiewicz

that is confirmed by a ^{14}C dating of wood: 4510±40 BP (Poz-71367). The second dating (9090±50 BP, Poz-66226) is unreliable. Sample (no. 7) was taken from the bottom of the grave, where a rust-brown lining was observed – most likely the remains of a mat. Also deciduous wood was identified, perhaps diffuse-porous.

Prydnistryanske barrow IV/feature 4 (Fig. 9 and 10). A grave of the YC [Klochko *et al*. 2015d: 217-222] with two ^{14}C datings: 4455±35 BP (Poz-66230;

Fig. 10. Prydnistryanske, Yampil Region, barrow IV/feature 4. Location of samples. Prep. by D. Żurkiewicz

wood), 4380±35 BP (Poz-66229; human bone). Some 17 samples (nos. 19-23, 25-27, 29-31, 35 and 89) were taken from various parts of the grave pit fill. In 15 of these there was identified the wood of ash from the majority of branches with a diameter from 2 to 4 cm and only in two cases thicker (4.5 cm and 5 cm). There was one case of oak from a branch with a diameter of 2.5 cm and one sample contained unidentified charcoal. The samples document the use of branches for 'grillage woodwork' – a scaffolding on which lay the "stone grave cover, sealed with mats from above and below" [Klochko *et al*. 2015d: 217]. The grillage was supported by eight poles placed vertically along the rectangle of the grave pit.

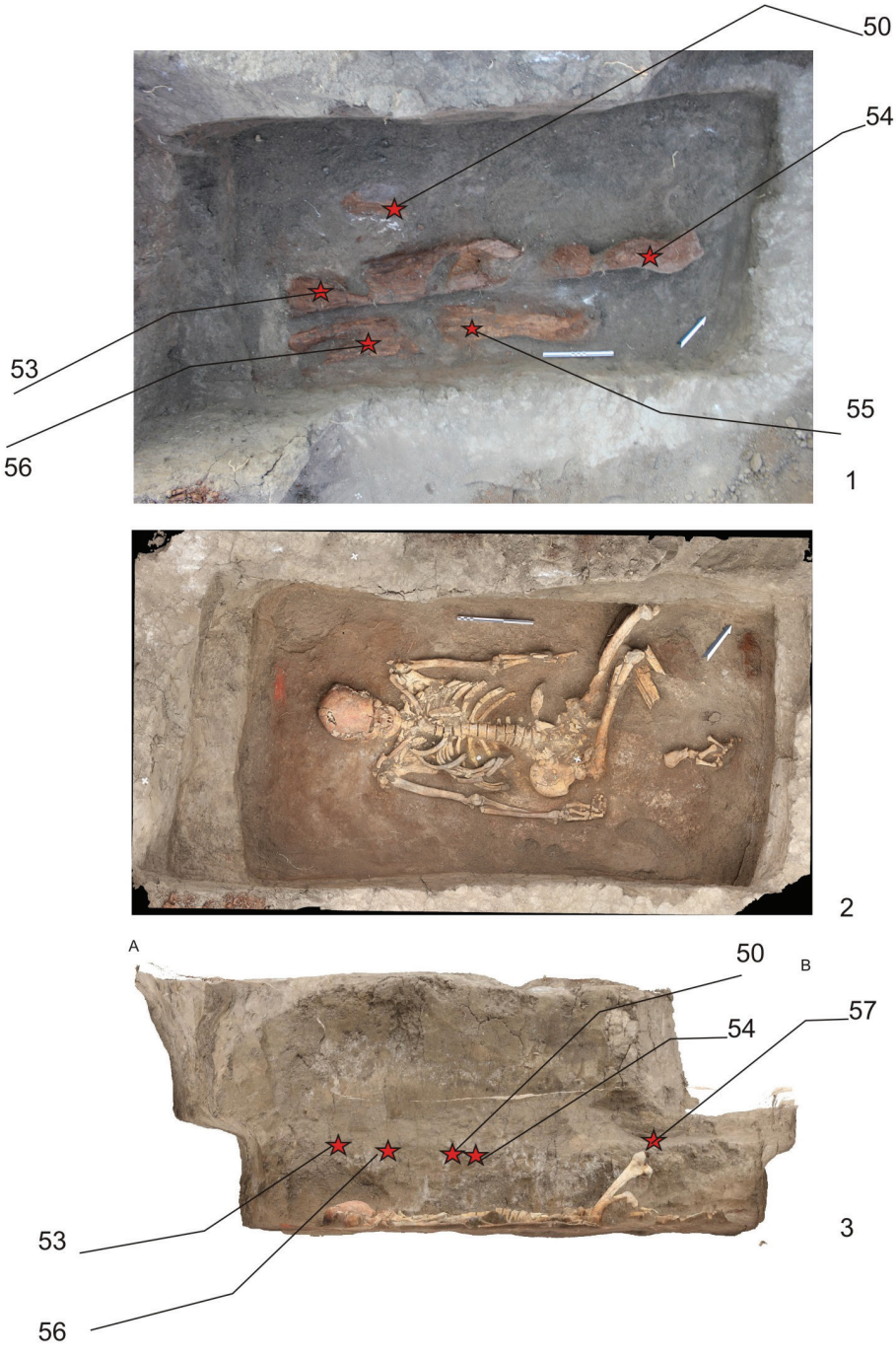

Fig. 11. Prydnistryanske, Yampil Region, barrow IV/feature 6. Location of samples. Prep. by D. Żurkiewicz

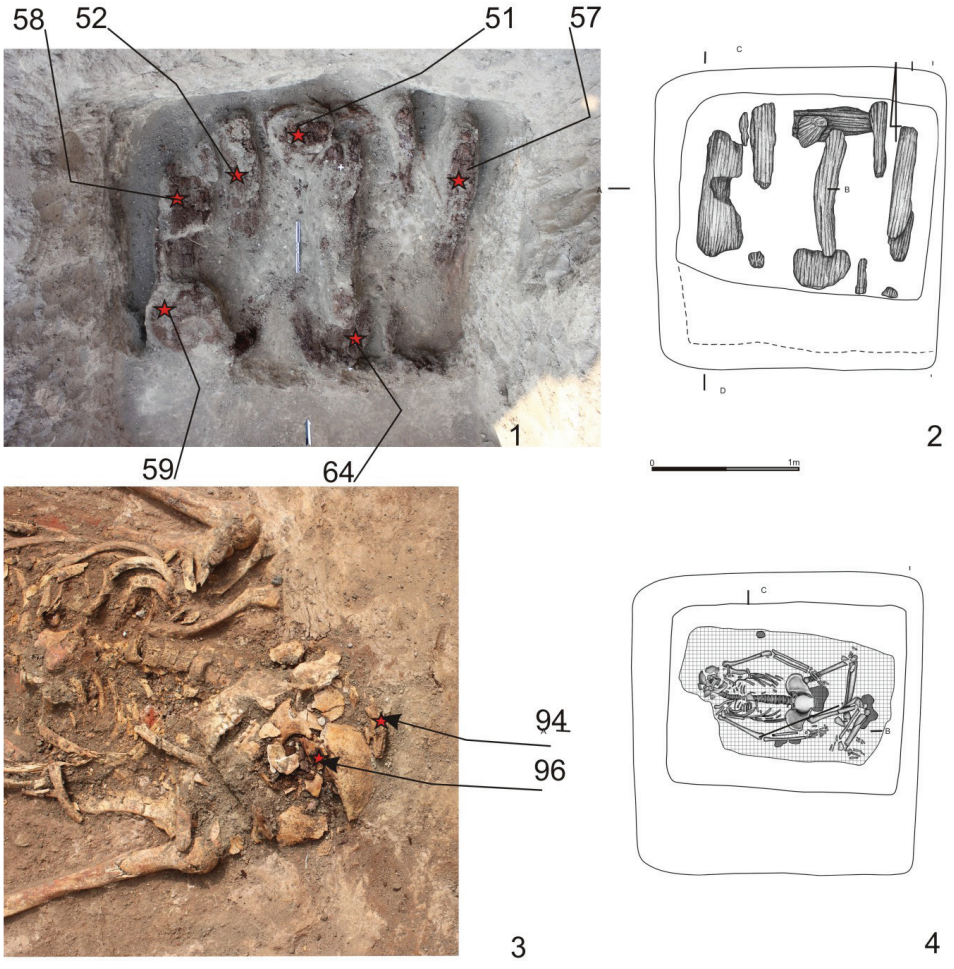

Fig. 12. Prydnistryanske, Yampil Region, barrow IV/feature 8. Location of samples. Prep. by D. Żurkiewicz

Prydnistryanske barrow IV/feature 6 (Fig. 11). The next human grave represented also the YC [Klochko *et al*. 2015d: 222-226] and has two ^{14}C datings: 4185±35 BP (Poz-66231; wood), 4090±40 BP (Poz-70673; human bone). Seven samples were taken from planks forming the grave cover. Oak was identified in all of these. The planks were laid along the longer axis of the grave.

Prydnistryanske barrow IV/feature 8 (Fig. 12). A grave of the YC [Klochko *et al*. 2015d: 227-230] with ^{14}C datings of human bone of 4090±40 BP (Poz-70673). Eight samples were taken: six at the level of the roofing (nos. 51-52, 57-59 and 64) and two from the bottom of the grave, near the skull of the deceased (nos.

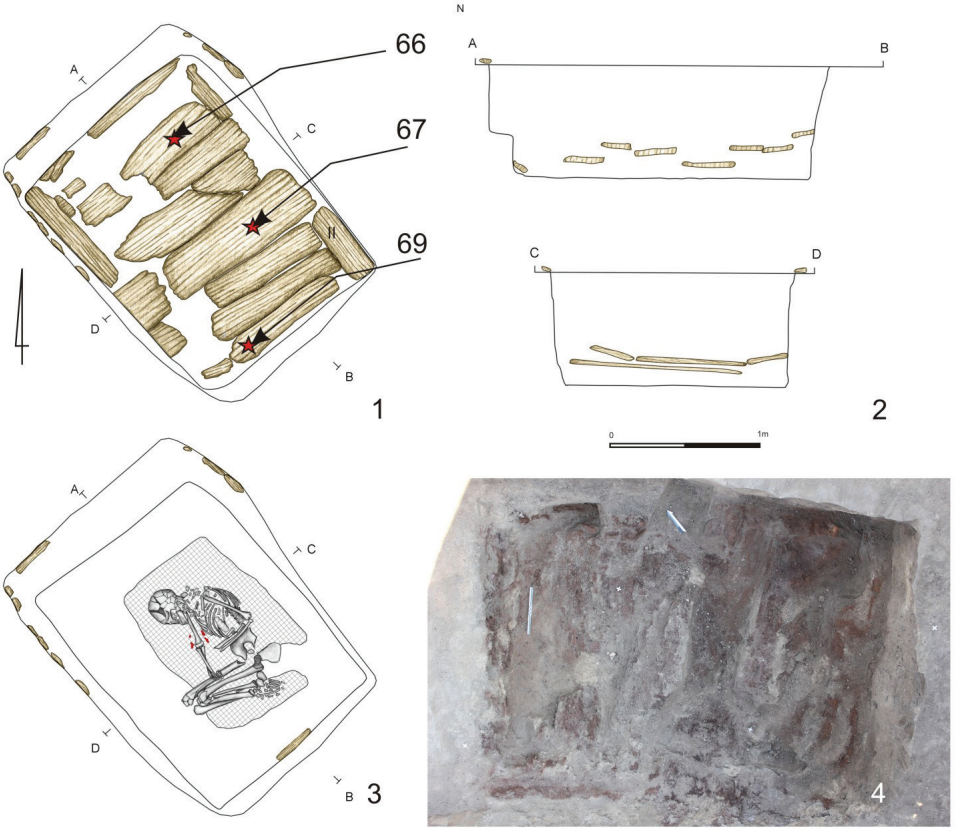

Fig. 13. Prydnistryanske, Yampil Region, barrow IV/feature 9. Location of samples. Prep. by D. Żurkiewicz

94 and 96). Samples from the upper level document the use of oak planks for grave roofing (in one case unidentified), which were placed transversely in relation to the longer axis. On the skull of the deceased a fragment of oak was also found, which most likely fell from the cover. The contents, however, of sample no. 94 taken from under the skull, from the mat it would seem, could not be identified.

Prydnistryanske barrow IV/feature 9 (Fig. 13). This was another grave of the YC [Klochko *et al*. 2015d: 231-234], where one ^{14}C dating of human bone was made, recording 4120±35 BP (Poz-66233). Three samples were taken from planks making up the grave cover. In all of these oak was identified. The planks were placed transversely along the longer axis of the grave and longer walls.

3. WOOD IN THE FUNERARY RITES OF CREATORS AND USERS OF RITUAL CENTRES, YAMPIL BARROW COMPLEX, IV-II MILL. BC

Thus in summarising the results of research conducted and placing it into a wider context, this study has focused on: (3.1) the possibilities of documenting the main species of trees identified in *Yampil Barrow Complex* objects and (3.2) how this wood was exploited in terms of (3.3) differences between the use of wood and the use of stone in grave constructions, and finally (3.4) an outline of the ritual significance of two species of tree identified, oak and ash.

3.1. THE POSSIBILITY OF FINDING WOOD IN THE NATURAL FOREST STEPPE LANDSCAPE ON THE MIDDLE DNIESTER

The above discussion in part two has attested to the widespread use of oak wood. Out of 25 objects where samples were taken, oak was recorded in 17 (graves, hearths and pits). In seven objects deciduous wood was identified and in one, ash. In five objects, however, the wood could not be identified.

In the natural forest steppe landscape of eastern Europe wood was in essence easily accessible because of the characteristic sylvan mosaic in this climate and vegetation zone (mainly stenothermal deciduous forests) and meadow steppe [Sudnik-Wójcikowska, Moysiyenko 2012: 48; Kirleis, Dreibrodt 2016: 172-174]. No doubt this was the same case in the forest steppe of the Middle Dniester [Makohonienko, Hildebrandt-Radke 2014: 262].

At present the prime source of oak wood in eastern Europe are dryland forests – fertile deciduous forests – part of the *Querceto-Carpinetum medioeuropaeum* group. The appropriate environment for these is fertile clayey or clayey-sand soils. Dryland silva are usually multi-species in nature, containing hornbeam and oak, less often lyndon, maple, sometimes elmer, beech and sporadically – in places more damp – ash [Medwecka-Kornaś 1977: 403-405]. In diachronic terms these forests are relatively late, for in the state familiar to modern observation they took form after the expansion of the hornbeam in Europe, dated to c. 2500 BC [4000 BP; Ralska-Jasiewiczowa *et al*. 2004: 72]. In earlier times the place of these silva could have been taken by others, once dominated by the oak [Makohonienko 2008: 367; *see* Kirleis, Dreibrodt 2016: 172].

For the ash the natural environment is a meadow-marsh silva in the valleys of larger rivers (the *Circaeo-Alnetum* group), though this species is also a less important component of highly placed dryland forests (*see* above). The ash prefers

wetland environments, remaining under the influence of permeable water or indeed even loci subject to seasonal flooding and is as a rule, associated with silt-mud soils and less often with black soils of the forest [Medwecka-Kornaś 1977: 396-398].

One can therefore sporadically encounter ash in the more damp areas of sylva and at times specimens of oak on wetland meadows. Notwithstanding, both these trees in principle prefer other environments. In the case of oak, dry upland terrain with heavy, fertile clayey soils, while ash prefers wetland terrains of river valleys with their silt-mud soils.

It is difficult to assess to what degree the above described contemporary silva in central Europe correspondent to prehistoric forests in the Pontic forest steppe. At present, because of the very high degree of anthropogenisation, these silva are preserved only in fragments, where there dominates the *Quercus robur* oak. Among the species of trees in the west the ordinary beech prevails (*Fagus sylvatica*), in the centre – the ordinary hornbeam (*Carpinus betulus*). These are accompanied by species of maple (*Acer sp. div.*), ordinary ash (*Fraxinus excelsior*) and small-leaf linden (*Tilia cordata*) [Sudnik-Wójcikowska, Moysiyenko 2012: 48-49; *see* also Kirleis, Dreibrodt 2016: 171-172].

The chronology of the *Yampil Complex* (IV-II mill. BC) corresponds to the second half of the Atlantic period and the first half of the Subboreal. The latter is tied to optimum climate conditions and the dominance of climax deciduous forests. This was a stage of turbulent and dynamic growth, and differentiation in the vegetation profile. The evolution of soils and vegetation took place, taking on the nature of typical progressive growth and developments. This was characterised by a gradual replacement of coniferous silva by deciduous forests typical for the mesocratic stage, where there took place the formation of a balance between climate and vegetation whereby temperatures reach the highest values in all of the cycle.

At that time there dominated deciduous forests largely populated by oak, elm, linden, ash and considerable hazel, ones forming tree species of a different than hitherto ecological scale characterised by a great ability for competition. These populated fertile habitats with humus of the silt type, which they at the same time co-created [Tobolski 1976: 192-194]. Near rivers and backwaters, on alluvial soils that were regularly flooded, forests became widespread as did meadow scrub with a dominating, depending on type, willow, poplar, alder and in somewhat drier parts, elm and ash. From the Atlantic period the anthropogenic factor began to play an increasing role in the shaping of the environment. At the close of the mesocratic stage climax forests began to be subject to successive changes of a regressive nature.

Of the two discussed tree species in stenothermal deciduous forests the oak appeared earlier, and was part of older (boreal) pine-oak woods. The oak heartily withstood climate changes and is still a significant element in contemporary mixed forests [Milecka *et al*. 2004]. Not only did the ash appear significantly later, but also relatively earlier began to lose in significance as a factor in forest creation in the territories of middle Europe [Tobolski, Nalepka 2004]. He was present – and

probably in a significant amount – in the fourth mill. BC [Kirleis, Dreibrodt 2016: 173]. This species achieved its greatest dissemination between 4000 and 3000 BC and the clear shrinkage of its radius took place around 2000 BC and from that time the significance and radius of the ash has relatively radically diminished. It is therefore a tree that is very sensitive to climate change and in addition, was subject to significant anthropopressure [Tobolski 1995: 14-15]. At present, the natural radius of ash occurs in east Europe up to the valley of the Volga [Boratyńska 1995: 44, Fig. 18].

The exploitation of ash and oak by inhabitants of the Trypolyean mega-sites attest to the availability of both these trees in the forest-steppe between the Southern Bug and Dnieper [Kirleis, Dreibrodt 2016: 173; Müller *et al*. 2017: 69].

Research from the second half of the 20th century in the Ukraine forest steppe has confirmed among others, the presence of forests containing oak, ash, maple, elm, linden, and hornbeam in the natural landscape of the Dnieper Valley [Chernyakov 1994: 133].

In conclusion, it can be proposed that two species of trees that were identified in samples from the *Yampil Barrow Complex*, oak and ash occurred in the natural landscape of the forest steppe by the Dniester.

3.2. WAYS OF EXPLOITING WOOD IN THE YAMPIL BARROW COMPLEX

In the funerary rite conducted by the creators and users of the *Yampil Barrow Complex* wood was exploited as a fuel and raw material for the production of mats and tool components, foremost as a construction material serving the production of planks out of which subsequently covers and roofing were made, as well as less often the walls of the grave pit.

At least five objects from the *Yampil Barrow Complex* document a differentiation of forms of using wood by Eneolithic communities (including the Gordineşti group of the Late Tripolye culture). Oak was a fuel whose remains were preserved in two hearths (Klembivka 1/4 and Prydnistryanske II/1). Parts of the roofing of one of the graves (Prydnistryanske I/1) was made out of deciduous and unidentified wood, while the planks creating the cover of another grave (Pidlisivka 1/1B) were made out of oak. Deciduous wood in all likelihood served for the production of 'mats' lining the bottom of one of the graves (Prydnistryanske III/3).

The most information gained on the use of wood concerned the peoples of the YC. In the main, these are attestations to the exploitation of planks for the purposes of constructing grave covers. These most often were hewn from oak and were placed over the grave pit according to its longer axis (eg. Porohy 3A/1, 3A/11,

3A/20, Prydnistryanske IV/6) or in transverse fashion (eg. Pidlisivka 1/11, Porohy 3A/12, 3A/15, Prydnistryanske IV/8). In one object (Prydnistryanske IV/9) planks were placed crosswise and in addition, placed along the longer walls of the grave. In one case the transverse placement of planks described in general is that it was made out of deciduous wood (Porohy 3A/10).

In another case, oak plans were used for the casing of a grave pit wall (Porohy 3A/1) and once a mat made out of identified raw material was found (Prydnistryanske III/3).

In the context of all the other objects of the YC the grave in Prydnistryanske IV/4 stands out. Both the form of producing the grave cover (stone blocks placed on grillage made out of branches and placed on a mat that supported vertically wedged poles) and the wooden material used for this purpose – ash, to be precise ash branches with a diameter from 2 to 5 cm [Klochko *et al*. 2015d: 217-222]. Graves with post vertical pole traces placed at the walls of the pit (the so called objects with little pits) also known from other parts of the forest steppe, most broadly identified in the Ingulec basin, where they constituted 3.9% of all YC objects in general [Melnik, Steblina 2013: 20]. Research on these indicates a possible function of strengthening or making the walls of graves and support for roofing [Dergachev 1986: 35].

Objects of the CC community have left traces of using deciduous wood, which was used for making planks for the grave cover in Pidlisivka 1/4. Also, the same wood was used for a handle that held the stone mace in this grave.

The NC used oak to make the covers for graves (Porohy 3A/3 and 3A/5); in one case the wood could not be identified (Porohy 3A/7).

In general, the dendrological identifications for archaeological sites dating to the 4th-2nd mill. BC in the forest steppe and steppe of eastern Europe are still quite few, despite the fact that wooden finds are relatively frequent. The most frequently identified wood is oak, with other species being much rarer, including ash [Chernyakov 1994: 173-173, attachment 1], though the latest research on charcoals in the Trypolyean mega-sites between the Southern Bug and Dnieper have revealed a domination of ash [Kirleis, Dreibrodt 2016: 173-174; Müller *et al*. 2017: 69].

Oak wood was often used for the roofing of Yamnaya graves as in Sadovoje grave 32 [Malyukevich, Agulnikov, Popovich 2017: 26] and in Sugokleja (Sugoklejska Mogila), where the grave covers were made out of logs and half logs as well as oak planks and cart wheels [Heußner 2009; Nikolova, Kaiser 2009; Nikolova 2012]. Wheels made out of wood found at other sites, for example from Bolotnoye, barrow 14, burial 29, in Crimea and from Vertolyetnoye Polye, barrow 1, burial 10 [Shishlina, Kovalev, Ibragimova 2014: 290]. The wood of ash was identified among others in a unique find of a lister in Balki – Vysokaya Mogila, grave 17 [Bidzilya, Yakovenko 1973; Chernyakov (Ed.) 1994: 173-173, attachment 1]. For the production of carts in turn, various species of wood were used, such as oak and ash. For example, wagons from the Ipatovskij barrow were made of *Rosaceae*, ash,

maple, durmast oak (*Quercus petraea*), oak (*Quercus robur)*, elm (*Ulmus* gen.) and hornbeam (*Carpinus* gen.), whereas in Ulan IV, barrow 4, elements of the cart placed in grave 15 of the CC were made out of elm, ash, maple and oak [Shishlina, Kovalev, Ibragimova 2014: 284 and 290].

Technical traits may have had an influence on the application of both of the above mentioned types of wood. Oak and ash belong to the same group of diffuse-porous deciduous trees and in part also have similar properties: their wood is hard, heavy, durable, though in the case of the ash it is unusually flexible and pliable. Both, in addition, are relatively difficult to process [Milewski 1965].

Oak is a wood that is widespread in forests, being highly durable, both in environments of constant and changeable dampness, was highly valued. Oak was described as: *'... An underwater building material or for long-serving craft, is one of the best woods'* [Berdau 1890: 151; Nowicki 1913: 149]. Ash on account of its lesser occurrence was less popular and not used as often in production. Nonetheless, its attributes were appreciated: *'... The strongest wood is ash...*[5] ; '*... It is highly resistant and durable, and moreover, is the hardest of woods*'.[6] Thanks to these properties of ash wood, it was used to make spars, such as the Macedonian sarissa [Sekunda 2001: 22-23].

Apart from endurance, and in the case of ash also flexibility, both types of wood have aesthetic attributes thanks to their hue, shine and profile. Oak is a hardwood, possessing a broad hardwood part in its internal section of the trunk and a narrow alburnous section at the external trunk circumference encompassing the remaining several dozen growths.[7] The hardwood parts are yellow-brown to olive-brown in colour and at times turning to dark, whilst the sapwood is much lighter in colour, usually yellow-white [Godet 2008: 58]. In the case of ash it is somewhat lighter in colour – initially after logging, the sapwood and hardwood usually are whitish to yellowish, at times the hardwood darkens and there are even examples of hardwood being dark brown [Godet 2008: 50].

The lustre of the wood in addition, increases the aesthetic attributes and inconsequence light from the smooth surface of the wood. Durable, hardwood deciduous species are characterised by a better lustre such as oak or ash, while much less so, soft non-hardwood and coniferous deciduous species [Krzysik 1978: 315-317]. The effect of the wood's lustre is augmented through additional working of the surface. In the case of grave constructions discovered in barrows there is nothing to suggest the exploitation of this attribute, for example through polishing or burnishing the surface.

Another aesthetic attribute is the profile of the wood, which is influenced by the width of growths and clear boundaries between them. Both oak and ash are charac-

[5] Archive, Chair of Slavic Ethnography, Jagiellonian University, interview no. 22E, Złożna, Żywiec County.

[6] Archive, Chair of Slavic Ethnography, Jagiellonian University, interview no. 3820, Glinka, Żywiec County.

[7] The number of sapwood growths in oak is differentiated and depends on, among others, the species of oak, habitat and individual characteristics.

Table 2

Wood and stone grave construction elements in the Yampil Barrow Complex

Grave construction element		Late Eneolithic	Yamnaya	Babyno	Noua	Sum
Cover	wood	4	13		3	20
	stone			5		6
	wood and stone	1	2			3
Wall structure	wood		1			1
	stone				1	1

terised by a uniquely clear profile of yearly growths. This is influenced by vessels of a large diameter concentrated in the part of the yearly growths of sapwood that can be seen in the form of rings and additionally, in the case of oak, clearly marked broad radii.

The fundamental characteristic making both these types of wood different is their endurance. In the case of oak in the extremely difficult conditions in the open it is estimated at about 120 years, while that of ash in such conditions, about 10 years and up to 20 in more favourable conditions [Szczuka, Żurowski 1970: 75]. In conditions of constant dampness, as no doubt was the case in barrows, the endurance of wood is significantly extended in period.

3.3. ELEMENTS OF WOOD AND STONE GRAVE CONSTRUCTION IN THE YAMPIL BARROW COMPLEX

Two construction elements in Yampil graves were made out of wood or stone: the cover and the structure of pit grave walls. In this context there are three forms of covers (roofing): wood, stone or wood and stone as well as two forms of wall structure: wood or stone. Their respective numbers are given in the Tab. 2.

From the above table it can be seen that there are differences in the frequency of using wood and stone in respect to chronology and taxonomy. In Eneolithic objects and those tied to the YC and that of Noua, wood dominated and as did much more rarely a combination of wood and stone (or just stone – the case of NC), while stone was used to the greatest extent by the peoples of the Babyno culture.

The above observations may have a vital significance for defining the regional specificity in the context of knowledge on other barrow assemblages, especially those tied to the YC [Shaposhnikova, Fomenko, Dovzhenko 1986: 15]. This is borne out by the more recent research, such as in the basin of the middle Ingulets, where graves with a stone cover constituted 35% as against 23% of objects with

roofing of wood [Melnik, Steblina 2013: 11]. The above picture has though, several exceptions, for example the steppe by the Ingul River there are known ritual centres of the 'pit' community that only have covers of wood [Nikolova, Kaiser 2009].

In the Dniester Region the situation is even more complex. On the one hand, research from the 1980s accented the dominance of wooden covers [Yarovoy 1990: 218-219], but in the most recent documentation of the Budzhak culture, the occurrence both of stone and wooden grave covers is emphasised [Ivanova 2013: 108]. Of particular note is the fact that in the Lower Dniester Region one of the concentrations of stone box graves can be found, where a part had covers [Szmyt 2014: 126-134 and Fig. 1]. Hitherto research of *Yampil ritual centres* of the YC has not revealed objects of similar description, while the use of wood in covers or wood and stone would appear to be one of the particular characteristics in the specific nature of the assemblage under research.

3.4. SYMBOLIC MEANING OF OAK AND ASH

In funerary rites of the creators and users of the *Yampil Barrow Complex* wood was used as a raw material out of which grave construction elements were made in the form of roofing made of planks and more rarely, the casing of pit grave walls. From time to time, wood appeared in the form of mats woven out of branches or as an element of a tool. A separate category of sources are charcoals from planks or single fragments – perhaps the remains of a symbolic cleaning of pit graves.

Construction elements in graves were mainly made out of oak planks. In the case of one particular grave the roofing construction was made in the form of a grillage made out of in the main, ash branches with the addition of some oak branches (Prydnistryanske IV/4). In Porohy 3A/10 however, the roofing construction was made out of planks from unidentified deciduous diffuse-porous wood.

In previous sections of this article oak and ash were discussed in terms of their utilisation value (technical and aesthetic properties). It is in particular among the Indo-European peoples that the role of oak and ash was manifested in various ways, finding expression in systems of beliefs, myths and customs, and importantly, the significance of both trees was usually associated with the male element.[8]

Of particular importance for the oak's cultural valorisation was its strength and power, which no doubt arose from its longevity, dimensions and monumental nature, as well as the very good quality of the wood (hardness, durability and endur-

[8] *See*, however, an opinion on the female nature of the ash [Pastoureau 2006: 103].

ance). These characteristics to some extent made the working of this wood more difficult but at the same time, underscored its unique value.

In the mythology of many Indo-European peoples wood had a similar symbolic meaning [Cirlot 2012: 108], being devoted to the deities of the storm: the Greek Zeus, Roman Jupiter, German Tor, Slavonic Perun, Baltic Perkunas [Brückner 1927: 414; Forstner 1990: 160; Szyjewski 2003: 45-46]. The Slavic peoples recognised the cosmogenic significance of oak, which was to have been witness to the beginnings of the world [Karwicka 1970: 296; Ziółkowska 1983: 70]. Large and old oaks according to Slavs gained unique meaning as the centre of pagan deities and as a locus for offering sacrifices [Herbord II, 32, foll. Labuda 1999: 174; Szyjewski 2003: 139; Gieysztor 2006: 89]. Some holy oaks were fenced off, where only those with privileges could enter for the conduct of rituals [Helmold I, 52, foll. Labuda 1999: 176-177].

Also after the Slavs accepted Christianity the oak was held in great respect. Thus it is in fact on this tree that most often wayside shrines were hung, as were crosses and holy images [Moszyński 1967: 527; Karwicka 1970: 291]. Old oaks were not felled, while damage to such a tree was accorded to the appearance of infectious diseases and the breaking of their crown meant death [Biegeleisen 1929: 454; Karwicka 1970: 289; Fischer 1937: 67]. Further, oak branches had a protective function and that is why they were used for decorating homes, stood in fields and used for wedding ceremonies [Fischer 1937: 67; Karwicka 1970: 295]. Oak was also used for healing; it was believed for example that its leaves had the power to resurrect a person [Fischer 1937: 68]. The smoke from oak leaves was seen to have a purgative function and oak wood was considered to be a means of protection against spells [Fischer 1937: 67]. In some graves of the *Yampil Barrow Complex* the presence of oak charcoal was noted, which may be interpreted as a relic of a symbolic cleaning by fire of the grave.

Oak was also associated with the world of the dead. It was believed that it protected against the spirits of the dead and therefore an oak log was placed on the tomb [Moszyński 1928: 163]. In the case of particular individuals such as those who had hung or drowned themselves – having died an unnatural death – the graves were struck through with an oak stake right through to the coffin [Fischer 1937: 67].

Despite the fact that the ash does not occur as often in the belief systems, myths and customs of prehistoric peoples as does the oak, its significance however, was at times elevated. In Scandinavia the huge ash known as the Yggdrasil, constituting the cosmic axis of the world, played the most important role [Słupecki 2006: 51]. In Greek mythology the ash was the wood of the god of war Ares, while Zeus created the generation of 'indomitable people' out of the ash [Hesiod I, 143-145; *see* Hesiod 1999]. A spear made of Pelion ash was a dependable weapon of Achilles [Homer XVI, 142-146; XIX, 389-391; XX, 278; XXII, 225; *see* Homer 1986]. The ash tree moreover, among the Slavic peoples was meant to have a good influence both on the living and the dead. Up until recent times the Polish village believed

that to sleep under an ash fortified the mind and at the same time, was a great deal safer than under another tree, for snakes avoided this tree from afar [Fischer 1937: 72; Karwicka 1970: 277-279; Ziółkowska 1983: 133]. Also, the branches of the ash were stuck into thatch so as to protect from demons [Moszyński 1935, Tab. 9-10; Fischer 1937: 72]. In Tatra Mountains ash sticks were used as an apotrope so as to make harmless evil forces [Moszyński 1935, Tab. 9-10; Fischer 1937: 72]. The dead buried in an ash coffin were meant to reach immediate eternal peace and did not wander across the four corners of the world as a spirit [Ziółkowska 1983: 133].

As in the case of the oak there existed a folk custom of placing wayward shrines and holy images on the ash as well as planting ash trees around churches [Ziółkowska 1983: 133], so as to ensure additional protection from evil for a holy place.

In the context outlined above of the symbolic meaning of the oak and ash it is possible to contextualise in this article objects from the *Yampil Barrow Complex*. There is no doubt therefore that the conduct of funerary rituals had a deeply symbolic expression. It would appear highly unlikely therefore that one of the elements of the ritual, such as the choice of wood for grave construction was accidental. The small gamut of marked taxons (only two types of tree: mostly oak and occasionally ash as well as the third – unidentified deciduous diffuse-porous) points to a deliberate choice of wood. The prevalence of oak can only be associated with the presence of oak in the immediate environment, but also because of its symbolic valorisation and technical attributes. Similarly, it is possible to interpret the use of ash branches in the grave Prydnistryanske IV/4.

It would appear therefore that as far as the funerary rite is concerned, the use of an element other than the accepted standard had to have had a clear intentional and highly symbolic meaning for the purposes of emphasising a particular otherness. In Prydnistryanske IV/4 not only were other types of wood used, but also a different roofing construction for the grave. These were not planks made out of the oak trunk, but a type of branch scaffold, mainly ash, on top of which a mat was spread, with stone blocks on top. In this way a type of canopy was made over the grave of the deceased community member [Klochko *et al*. 2015d: 241].

Thus it is difficult at present to claim unreservedly what the above-mentioned otherness possessed in meaning. For example, was it so as to mark the lower status of those interred? Rather not, for ash wood is characterised by equally good properties and visual attractiveness as the oak is – moreover no doubt was less often encountered in forests at that period. Also, the elaborated grave construction containing not only a wooden scaffold but in addition also mats and stone blocks, points to the intention of underscoring a particular difference in this particular grave.

4. SUMMARY

The research conducted indicates the selection of a particular species of wood used in funerary rituals. Traces of other species of wood than oak, are taken from trees being part of stenothermal climax forests in the IV-II mill. BC and no doubt growing in the immediate vicinity, additionally emphasises the deliberate nature of choosing oak as the dominant type of wood.

Both types of wood identified in the *Yampil Barrow Complex* (oak and ash) belong to the same group of deciduous diffuse-porous trees and are characterised by similar properties; the only element that sets them apart is durability. In the case of oak it is very high while in ash significantly lower. Both the wood of oak and ash is recognised as valuable and visually attractive. The fact that they are more difficult for the purposes of working – in comparison to other species of trees – all the more underlines their construction value to which they were used.

The domination of oak among the covers of pit graves may be associated with not only technical and aesthetic properties but also – perhaps in particular – with its symbolic valorisation. This, to an even greater extent, may be related to the unique ash roofing construction in Prydnistryanske IV/4, which in a clear way accents the different nature of this particular grave.

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