"LUCIAN BLAGA" UNIVERSITY OF SIBIU FACULTY OF HISTORY AND PATRIMONY INSTITUTE FOR THE STUDY AND VALORIFICATION OF THE TRANSYLVANIAN PATRIMONY IN EUROPEAN CONTEXT

ACTA TERRAE SEPTEMCASTRENSIS

IX







Sibiu - 2010





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IX

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UNPUBLISHED DATA ON THE MANAGEMENT OF MAMMALS IN THE SETTLEMENT PETREȘTI FROM MOȘNA (SIBIU DISTRICT)

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Keywords: Petrești A-B level, Petrești B level, mammal remains, ritual pit, waste pit, slaughter age.

Abstract: The article deals with analysis of 335 animal bones collected from a dwelling and numerous waste and ritual pits, dated in A-B and B phases of Petrești culture. The first part includes a report of the distribution of taxa in different contexts, in terms of skeletal remains and minimum number of individual. Then, one make assumptions about the mortality profiles, withers heights and body conformation, as the frequency of taxa in several settlements Petrești from Transylvania.

The site is located 3 km south from Moşna village (which is 8 km SE of Mediaş, Sibiu District), at a place named "Pe Tablă"/"La Râpă". The landscape is dominated by rolling hills, 300-600 m altitude, cut by small streams, characteristic of the Târnava Plateau. The Moșna stream is draining the area, flowing to the south side of the hill, which is located the settlement. The vegetation today is dominated by durmast oak woods with hornbeam, much more expanded in the past. А meadow vegetation developed along stream courses (Posea et alii 1982, 695). The rescue excavation started in 2003 established the limits of the prehistoric site, 100 m long and 60 m wide. The findings belong to Petrești A-B, Petrești B and Coțofeni III subcultures (Gonciar et alii 2007, 40). During excavations of 2003-2006 few animal bones were collected, as to the 0.60-0.70 m layer of culture is disturbed. From this deep down, samples were taken into account. There have been analyzed two lots of bones belonging to both levels of Petresti culture, stratigraphic clearly defined. The first sample totaling 83 bones, comes from the lower level (dated in the late Petresti A-B), the second summing up 325 bones comes from the upper level (dated in early Petresti B) (Gonciar et alii 2007, 45). About 16 animal remains, taken from trenches: S3, S4, S5, not stratigraphically assigned, were excluded from statistics. To separate the bones of Petrești levels from those in the top layer (mixed sample), very helpful have been their pigmentation, different from layer to layer. Thus the recent bones are light-colored, than those of levels Petresti, more blackish. We add that, the bones are poorly preserved due to high degree of fragmentation, burning activities and bad preserving conditions (the forest soil rich in humic acid corroded the bones).

Distribution of taxa into the site

Petrești A-B level has provided 83 remains, of which 72 fragments have been specifically assigned to five domestic and three wild species, as table 1 shows. The sample originates in three wastes pits (Pit 1, 4, 10), two "ritual" complexes (Pit 7, 8) and cultural layer of culture from trench S7. **Pit 1** localized in the central part of trench /S1, at a depth of 110 cm furnished few materials.

Petrești AB	Pit 1	Pit 4	Pit 7	Pit 8	Pit 10	Layer	NISP	%
Bos taurus	2	1		4		11	18	25
Sus s. domesticus	1	7		1	1	8	18	25
Ovis/Capra	2		4	4		10	20	27.8
Canis familiaris	1						1	1.4
Cervus elaphus		1	3			7	11	15.2
Capreolus c.						1	1	1.4
Lepus sp.	2					1	3	4.2
Determined	8	9	7	9	1	38	72	100
Bos/Cervus						11	11	
Total sample	8	9	7	9	1	49	83	

Table 1: Distribution of taxa as NISP in Petrești A-B layer.

In terms of bones, eight remainders originating in one adult cattle, one goat slaughtered towards 12 months (early spring), one pig 14-16 months old (M3 in crypt), one dog, one hare and one sub-adult red deer, 14-15 old (M2 in eruption) (Azorit 2002, table 4) were identified. Pit 4 placed south-western side of S4, at 90 cm depth, contained nine bones from one cattle, one red deer and two pigs. From a sucking pig, a couple of humerii and tibiae, a part from acetabulum and a left femur were determined. The bones have the ends burnt. Another radius originating in another sucking pig, younger than former (so it seems, according to the radius size) was also identified (fig. 1). Pit 10 was shaped in the southern corner of trench S10, at 123 cm depth; it contained few bones. Among structural clay fragments has been identified a single splinter from the braincase of a sub-adult pig. Pit 7 was excavated in the eastern extension of S7, at a depth of 105 cm. The pit is made in two phases. The initial hole was excavated down to the surface of the yellow sterile sand and filled with intensely burnt fragments of structural clay... placed cold in the pit, intermixed with bones and stone tools. The tools were functional and were put there on purpose, not simply discarded. A smaller cylindrical pit was dug in the middle of the larger one, its walls being decorated or reinforced with antlers¹, fragmented vases being placed on its floor. It was filled with ashes intermixed with bones and shards (Gonciar et alii 2007, 44). In terms of bones, the small pit provided a portion of an antler base with pedicle. The beam and branches have been removed above the rose; the piece comes from a mature/old male, taking into account the ratio of diameter/length of the pedicle - 43/30 mm (Hattemer, Dreschler 1976, tab. 2). Certainly, the stag was hunted during cold season. This detail suggests

¹ Is the observation of the archaeologists who performed the excavation into the site.

¹⁵²

the occupation of the settlement, over the winter. Mention also, the anther has blackish spots, due to either fire or from the ashes that filled the small pit. A distal metacarpal, with Bd/Dd-53/33 mm and a thoracic vertebra seems to belong to the same individual too. They were found in the same context as the anther. From large pit filling (presumably, blackish spots on bones were not observed) were harvested

	Pit 1	Pit 4	Pit 7	Pit 8	Pit 10	Layer	MNI	%
Bos taurus	1	1		1		2	5	21.7
Sus s. domesticus	1	2		1	1	1	6	26.1
Ovis/Capra	1		1	1		2	5	21.7
Canis familiaris	1						1	4.3
Cervus elaphus		1	1			1	3	13.1
Capreolus c.						1	1	4.3
Lepus sp.	1					1	2	8.7
Total	5	4	2	3	1	8	23	100

Table 2: Distribution of mammals as MNI in Petreşti A-B layer.

three ribs and a distal metatarsal sheep, belonging to a lamb. **Pit 8** was identified in NE side of S1/2 and SV of S8, at ca. 63 cm deep. A large pouring vessel and a small drinking cup were placed on its floor. "A kid or a lamb skull and several snail shells" were found on the same level as the vessels (Gonciar et *alii* 2007, 44). Indeed, from that complex, we determined a portion of the occipital region + upper jaw of a ram. We are talking about an animal slaughtered between 3-4 years and not a lamb. The snail shells nothing of saying, I have not found anything like that in the sample, probably were lost. An epistropheus comes from a pig, maybe it was lost in the pit with earth filling. From cattle were determined four bones suggesting, at least one adult exemplar (distal radius epiphysed). Under name "layer" we included bones taken from S7, the level under the house, dated in Petreşti A-B. The 43 remainders derive from almost all identified species, excepting the dog; they suggest minimum eight individuals (table 2).

Petrești B level has provided 252 remains, of which 235 fragments have been specifically assigned to five domestic and five wild mammals. The material was taken from a house, a waste pit (Pit 2) and cultural layer. **The habitation complex** of 3/ 4.5 m, oriented NW/SE, was built on the

Petrești B	House	Pit 2	Layer	NISP	%
Bos taurus	12	8	56	76	32.3
Sus s. domesticus	11	7	18	36	15.3
Ovis/Capra	12	13	39	64	27.2
Canis familiaris			2	2	0.9
Cervus elaphus	18	1	24	43	18.3
Sus s. ferrus	1	1	4	6	2.6

Table 3: Distribution of taxa as NISP in Petreşti B layer.

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Capreolus c.			1	1	0.4
Lepus sp.		2	4	6	2.6
Ursus arctos	1			1	0.4
Determined	55	32	148	235	100
Bos/Cervus	3	1	13	17	
Total sample	58	33	161	252	

Table 4: Distribution of mammals as MNI in Petreşti B layer.

Petrești B	House	Pit 2	Layer	MNI	%
Bos taurus	2	2	8	12	23.5
Sus s. domesticus	3	2	4	9	17.6
Ovis/Capra	3	2	7	12	23.5
Canis familiaris			1	1	2
Cervus elaphus	2	1	5	8	15.7
Sus s. ferrus	1	1	2	4	7.8
Capreolus c.			1	1	2
Lepus sp.		1	2	3	5.9
Ursus arctos	1			1	2
Total	12	9	34	51	100

ground, and with wall of wooden structure covered by clay. The house contained few materials, which led the authors of the research, stating that: "the house has been emptied before it was set on fire, probably looted" (Gonciar et *alii* 2007, 46). In this context, we have got for determination about 58 animal bones, of which one third comes from red deer (table 3). Twelve exemplars

Dating		Petrești A-B				Petrești B			
Skeletal element	Pit 1	Pit 4	Pit 8	Layer	House	Pit 2	Layer		
skull					1	2	2		
mandible+ teeth						1	7		
scapula					1		1		
humerus				2	2		2		
radius			1	1	1		2		
ulna							2		
carpals							2		
metacarpal					1	1	4		
pelvis			1				2		
femur							2		
tibia			1	2	1		4		
tarsals	1	1		1	2		4		
metatarsal							6		

Table 5: Distribution of cattle sample in different contexts.

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phalanges	1			5			4
vertebrae			1		2	2	8
ribs					1	2	4
total	2	1	4	11	12	8	56

Dating			rești A-B			Petrești B		
Skeletal element	Pit 1	Pit 4	Pit 8	Pit 10	Layer	House	Pit 2	Layer
Skull	1			1	2	2	2	1
mandible+ teeth						1		4
scapula								2
humerus		2						2
radius		1				1	1	
Ulna								2
metacarpal					1			
pelvis		1				1		1
femur		1				2		1
Tibia		2						1
tarsals						1		
phalanges					1			
vertebrae								2
Ribs			1		4	3	4	2
Total	1	7	1	1	8	11	7	18

Table 6: Distribution of pig sample in different contexts.

of them, almost reached the adult stage). The eleven pig bones are distributed at individuals: one killed in the first year, another one around 14-16 least three months (M3 in crypt, cf. Horard-Herbin 1997, tab. 26) and a third one, over 3 years (one calcaneus epiphysed). Height at the withers of this individual is estimated at 72.65 cm (Teichert 1990, apud Udrescu et alii 1999). As mentioned above, a numerous sample comes from adult red deer individuals. And finally, an atlas and an acetabulum from a boar and a bear were determined too. Pit 2 was shaped in the center of trench S2, at 65 cm depth, being composed by four levels of burnt clay, separated by earth strata. Thirty-three faunal remains come from levels 2-4 and derive from nine individuals (table 4). Most bones become to sheep, the thirteen fragments suggesting an individual slaughtered by 2 years (upper and lower M3, in final eruption) and another between 3-4 years (an upper M3 in incipient wear). Cattle rank the second with eight bones from two exemplars: one individual 24-30 months old (upper M3 in eruption) and another above this limit (distal metacarpal epiphysed). The pig sample count seven bones from one sub-adult (killed by 18 months, according P4 already erupted, radius-distal not epiphysed) and another one with age not specified. A distal tibia and a metapodial

from an adult hare complete the pit sample. The most numerous sample was collected from cultural layer 161 remainders, excepting bear, all the other species are represented. Approximately 35% of sample belongs to cattle, 24% to small ruminants, 15% to red deer, 11% to pig and 6.8% to other species (dog, boar, hare and roe deer). On the quantity of bones recovered from Petresti A-B complexes, animal bones are too few, to provide solid data, so we will emphasize only some aspects: the so-called waste pits (1, 4 and 10) have fewer bones, as we have expected. Without doubt they had a minor role to storage the animal remains from household consumption, at least this fact results from the distribution of samples. In other news, the special/ritual role of the pits 7, 8

rather results from analysis of other archaeological inventory, than from bones distribution. From Petrești B level more bones were harvested for analysis.

Dating			rești A-B	1 0	Petrești B			
Skeletal element	Pit 1	Pit 7	Pit 8	Layer	House	Pit 2	Layer	
skull			1			2	3	
mandible+ teeth	1				4	4	8	
scapula				1	1		4	
humerus				2			2	
radius					2	1		
ulna				1				
metacarpal							1	
pelvis							3	
femur				1			1	
tibia					2		4	
tarsals							2	
metatarsal		1		1	1		2	
phalanges					1		2	
vertebrae	1						1	
ribs		3	3	4	1	6	6	
total	2	4	4	10	12	13	39	

Table 7: Distribution of sheep/goat sample in different contexts.

Pit 2 seems to be closely linked to house, there are many matches between their bones, perhaps they functioned at the same time; namely, bones from the same individuals may have accumulated inside. One presumption would be that, individuals of the same age class were identified in both cases. Unfortunately, fragmentation and scarcity of lots can not offer clearer evidence. It is only an impression, and as such must be considered.

Related to taxa distribution in terms of skeletal elements within pits, few things can be said. In case of cattle, sheep and red deer, a dispersal of skeletal elements, mostly from column, distal ends of hind limbs, jaw and isolated teeth (low meaty

regions) in the layer (regardless of cultural phase) was registered. The presence of skull elements from wild boar and cervids proves the assertion that, carcasses were entirely carried into the settlement, there being hacked.

Age profiles

We start with the group of small ruminants, most elements for assessing dental age of slaughter, being supplied by them. In the early phase of the site five individuals were supposed, of

Dating		Petrești A-B			Petrești B			
Skeletal element	Pit 4	Pit 7	Layer	House	Pit 2	Layer		
skull		1		6		2		
mandible+ teeth			1	1				
scapula			1			1		
humerus			2					
radius				1		1		
metacarpal		1		2		2		
femur				1				
rotula						1		
tibia			1	1		2		
tarsals	1			2	1	2		
metatarsal			1	3		7		
phalanges			1			4		
vertebrae		1				1		
ribs				1		1		
total	1	3	7	18	1	24		

Table 8: Distribution of red deer sample in different contexts.

which one goat and four sheep, taking into account the dentition. A goat was slaughtered in the first year of life and a ram around 3-4 years. Three other sheep were identified with regards to the sutures of long bones: a specimen killed in 12 months, and two between 1-2 years (table 9, fig. 5). In Petreşti B sample, 12 sheep were identified, of which 8 individuals were supposed by dentition. Half of them were cut between 1-2 years, one at 2.5 months, and three between 2-6 years. Given some data provided by the fusion of long bones of the 12 identified animals, a rate of 25% was culled in the first year of life, 41.7% in the second year, 16.7% between 2-4 years and 16.7% above this limit. Specifically, in both levels, there is a rate of 41% animals killed between 1-2 years (class D) and about 30% animals slaughtered up to a year, (classes BC). Therefore, meat production was concerned in particular (type B and A) (Blaise 2009, fig. 20). Milk products and wool exploitation was done on smaller scale. Classes FG (meaning adult-mature sheep), barely amounts 23%. In the management of cattle, the following can be stated: for the Petresti A-B level, slaughter age appraisal was done on bone sutures only, in the absence of

dental remainders. Thus, of five individuals, one is slaughtered between 1-2 year, three between 2-4 years and one over the stage (fig. 4). The material from the upper phase has provided evidence for at least 12 cattle; five of them were identified just by dental criteria. Overall, of the 12 individuals, 16.7% was killed between 1-2 years, 50% between 2-4 years and about 33.3% over this limit, no calves were found. So in both cases, the exploitation of animals is focused on achieving maximum production of meat, given the prevalence of animals slaughtered between 2-4 years (50%), when they reached optimum slaughter

Context	Dating	Taxa	Specimen	R/L	Eruption/ MWS**	Age	Stage
Pit1/	Petrești A-B	Goat	Md+M2	r	05	6-12 m	С
Pit8/	Petrești A-B	Sheep	Mx+M3	1	Early/medium	36-48 m	F
Pit8/	Petrești A-B	Sheep	Mx+M3	r	Early/medium	36-48 m	F
House	Petrești B	Sheep	M3 inf.	1	h13	4-6 y	G
House	Petrești B	Sheep	Md+M3	1	J	22-24 m	D3*
House	Petrești B	Sheep	Md+M1	r	J	5-6 m	B2
Pit2	Petrești B	Sheep	M3 inf.	1	U	22-24 m	D3
Pit2	Petrești B	Sheep	M3 sup	r	Erupting	22-24 m	D
Pit2	Petrești B	Sheep	M3 inf.	r	U	22-24 m	D3
Pit2	Petrești B	Sheep	Mx+M3	1	Early wear	36-48 m	F
Layer	Petrești B	Sheep	M2 sup	1	Early wear	12-18 m	D
Layer	Petrești B	Sheep	M3 inf.	1	U	22-24 m	D3
Layer	Petrești B	Sheep	Md+P4	1	h13	4-6 y	G
Layer	Petrești B	Sheep	M3 inf.	1	e10	24-36 m	Е
Layer	Petrești B	Sheep	Md+M3	r	Е	16-22 m	D2
Layer	Petrești B	Sheep	Md+M2, P4	1	P4-E M2-07	16-22 m	D2
Layer	Petrești B	Sheep	dp4	r	c8	2-5 m	B1

 Table 9: Kill-off patterns in small ruminants.

*Greeenfield 2007; ** Payne 1987, Grant 1982

weight. A relatively significant percentage of animals kept over four years, involves exploitation of milk and labor by the Petrești B community. Unfortunately we cannot specify the upper limits for keeping livestock, the assessments being made solely on the long bones. Related to the exploitation of domestic swine, we have only a few estimates on the dentition; by supplementing them with information of poscefalic skeleton, one obtained the following picture: of six animals, two of them have not specified the exact age class, if we consider the faunal sample in the lower level of the settlement. Three pigs are 0-6 months old (two animals) and one 14-16 months. The material from the upper level provided age data for nine pigs, of which for one did not specify the precise time of slaughter. For the other eight statistics show that: 37.5% was killed in the first year of life, just as in the second, and 25% between 3-3.5 years.

G .	Pit	Pit	Pit	Layer	Sub-		Pit	I D	Sub-	T . 1	04
Caprinae	1	7	8	AB	total	House	2	Layer B	total	Total	%
2-6 m						1		2	3	3	17.6
6-12 m	1			1	2					2	11.8
12-24 m		1		1	2	1	1	3	5	7	41.2
24-36 m								1	1	1	5.8
36-48 m			1		1		1		1	2	11.8
48+						1		1	2	2	11.8
Total	1	1	1	2	5	3	2	7	12	17	100
	Pit	Pit	Pit	Layer	Sub-		Pit		Sub-		
Cattle	1	4	8	AB	total	House	2	Layer B	total	Total	%
12-24 m				1	1			2	2	3	17.7
24-48 m	1	1		1	3	1	1	4	6	9	53
48+			1		1	1	1	2	4	5	29.3
Total	1	1	1	2	5	2	2	8	12	17	100

Table 10: Distribution of caprinae and cattle according age profiles.

Animals with extremely worn dentition or slightly worn were not identified. It seems that, between 1-2 years pig reached the optimal weight for slaughter, as evidenced the slaughter classes. The three bones of dogs (canine with open roots, a piece of acetabulum and an epiphysed proximal ulna) suggest two specimens over 6-12 months. The assemblage from Petreşti A-B phase provided data for at least, three adult red deers. About eight deers were supposed based on the sample from Petreşti B level, of which two undetermined as age. Of the other six, one is sub-adult (one metacarpus distal not fused) and the rest are adult-mature. A taxon with increased material than usual is the hare, it ranks the second among wilds. One mandibular articulation, one proximal radius and a fused calcaneus originate in two adults from the

older phase (first from Pit 1 and the second from layer). The upper deposit contained six bones from at least three hares, one from pit 2 and two from layer. Wild swine bones were collected just from the upper level. Mortality curve shows that, of the four individuals, at least two are mature. A very mature exemplar showing a third lower molar in advanced wear (corresponding to J14, cf Grant 1982) was identified. From roe deer were identified a proximal phalanx (Petreşti A-B sample) and a P4 in eruption (Petreşti B); the pieces belong to an animal over 6-7 months and another one hunted not long after one year (Tomé 1999, tab. 2).

Body size data

About size and body conformation of mammals exploited by Petrești communities at Moșna, few assessments were made, in the absence of more numerous material and less broken. However, I used some analogies with fauna from Zau de Câmpie and Tărtăria (Bindea 2008, 70-74), inhabited about at the same time. In the light of these comparisons we assume that, cattle were still robust, with relatively high waist. Although we have no estimates of cattle size at Moșna, the

sample from Zau de Câmpie provided enough data on this parameter: heights of 120.9 cm for females and 129-137 cm for males were estimated (Bindea 2008, 137). The few dimensions, taken on width of bones from Moşna, suggest still robust individuals. We mention a length of 40 mm for LM3, a value close to the lower limit of aurochs variation. For example, the scatter-diagram of distal tibia in sites Petrești (turned into log-ratio, fig. 8) emphasizes the large limit of variation of this parameter, the upper values closed to aurochs data. The metric data are insufficient for sheep and goats from Moşna. The few measurements of bones and teeth, show small-sized sheep and medium-sized goats. Related to height at withers, a value of 65.8 cm was calculated on a talus. Values of 74,1 cm (Zau de Câmpie) and 59,9 cm (Cheile Turzii) were estimated based on calcaneus (Bindea 2008, 152). The few measurements of red deer bones are placed in the middle-

Cattle	Dating	Specimen	R/L	Eruption /MWS*	Age
Layer	Petrești B	Incisor 2	1	just erupted	24-30 m
Layer	Petrești B	M1 inf		d9	12-16 m
Layer	Petrești B	M3 inf	r	1/2	24-30 m
Layer	Petrești B	M3 inf	1	j14	36+
Layer	Petrești B	M3 sup	1	erupting	24-30 m
Pit 2	Petrești B	M3 sup	1	erupting	24-30 m
House	Petrești B	M3 sup	r	erupting	24-30 m
Pig	Dating	Specimen	R/L	Eruption /MWS	Age
Pit1/	Petrești A-B	Mx+M3	1	in crypt	14-16 m
House	Petrești B	Md+M3	r	in crypt	14-16 m
Pit2/	Petrești B	Mx+P4	1	just erupted erpt	14-16 m
Layer	Petrești B	Md+dP4	1	just erupted erpt	0-2 m
Layer	Petrești B	Md+M3	r	S1/2	18-20 m
Pit2/ Layer Layer	Petrești B Petrești B	Mx+P4 Md+dP4 Md+M3	1	just erupted erpt just erupted erpt	14-16 m 0-2 m

Table 11: Kill-off patterns in cattle and pig.

*Higham 1967, Grant 1982;

upper limits of species variation as compare to similar records (Bindea 2008, 447-452). We refer to humerus, tibia, metacarpal and distal radius measurements. Preferential hunting of male specimens may explain this. No data metric for wild boar, with the exception of a lower third molar showing an increased length, of 47 mm. Hare measurements falls within the range size variation of Transylvanian Eneolithic (Bindea 2008, 462-463).

T	abl	le 1	12	2: 1	D	Distri	bution	of	pig	accordin	g age	e profiles.
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Pig	Pit 1	Pit 4	Pit 8	Pit 10	Layer AB	Sub- total	House	Pit 2	Layer B	Sub- total	Total	%
0-6 m		2			1	3	1		1	2	5	33.3
6-12 m									1	1	1	6.7
12-24												
m	1					1	1	1	1	3	4	26.7

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36-42												
m							1		1	2	2	13.3
Age?			1	1		2		1		1	3	20
Total	1	2	1	1	1	6	3	2	4	9	15	100

Species frequencies as NISP, MNI and meat weight

In terms of cattle remains, their share increased from 21.7% in the early phase (Petreşti A-B) to 32.3% in the late one. In terms of MNI (minimum number of individuals), the frequencies do not change appreciably, they slightly decrease from 25 to 23%. Ovicaprids increase in frequency from 21 to 27% (as number of bones) and decrease from 27 to 23% (as individuals) along the site occupation. Pigs share significant decreases to the end of settlement (from 26 to 14%), the same trend is seen in statistics on individuals (25-17.6%). On red deer, there is an increasing trend towards higher levels, from 13-18% (as NISP). Overall, the share of game is 24/26% in Petreşti A-B, registering a noteworthy raise of 33%, towards the end of site (as MNI) (fig. 2, 3) A regular presence, not to be neglected, is the hare, which reaches a frequency of 8% as number of fragments, in the early levels of the site.

A theoretical estimating of the meat amount provided by the presumed individuals established that: domestic species accounts for 80% and the game just 20%, in the early levels. Specifically, beef totals 52.1%, mutton 16.2%, pork 11% and red deer 19%. Domestic mammals provided about 70%, specifically, beef over 48%, small ruminants 12% and pork 9.2%, in later levels. Red deer makes up 17.3%, boar 7.7%, bear 4.9%, hare and roe deer less than 1%. Frequency of taxa in terms of quantity of meat highly differs from MNI and NISP distributions (fig 6, 7). And that is because, the NISP and MNI estimation do not establish a clear hierarchy of the identified taxa; the estimated meat method by far, put forwards the value of cattle as mains meat source for Petreşti communities. In fact, the age profiles also emphasize the same deem.

When interpreting the faunal remains from the earlier period, we found that: small ruminants overcome cattle in terms of NISP and pig overcomes them in terms of MNI. Nevertheless, cattle were the most important element in Petrești economy; the mortality profiles shows almost no calves, the prevalence of the adults kill-off (peak between 2-4 years) and a lesser percent of animals older than four years at death (about one third). This scheme suggests a chiefly meat exploitation, working, dairying and breeding purposes to a lesser extent. In case of pig, one notes a high rate of immature specimens, slaughtered for meat, usually before two years. There is few data about caprins age profiles, according them, sheep was used as meat source. Data collected from the late period sample suggest the prevalence of cattle and sheep as dominant trend; much of the cattle were bred primarily for meat (meaning 17.7% young exemplars, and 53 % sub-adult/young adults). No doubt, the species was used for other purposes, such as diary products, draught power, just as the 30% of animals killed over four years supposes. Flocks of small ruminants, more sheep than goats accounted, presumably taking into account the sheep/goat rapport = 15/2, as it is reflected by Moşna sample. As stated before, the meat production was the main aim of small ruminants' exploitation. Dairy products, wool

production, and breeding flock were exploited to a lesser extent, as the percent of 23% suggests.

It is very likely that the main domestic mammals may have been fed in the wooded surroundings of the site. Also, the mortality profiles claim that the settlement was inhabited all year round and not seasonal.

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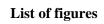




Fig. 1 – Bones from pit 1.

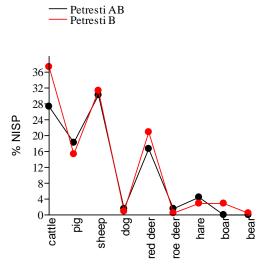


Fig. 2 – Species frequencies as NISP.

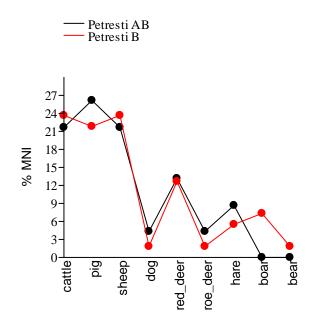


Fig. 3 – Species frequencies as MNI.

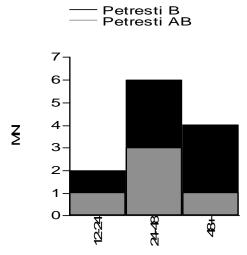


Fig. 4 – Age profiles of cattle.

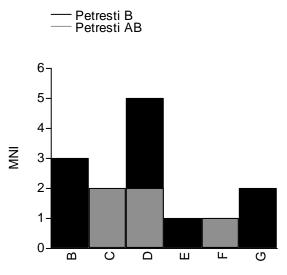


Fig. 5 – Age profiles of sheep/goat.

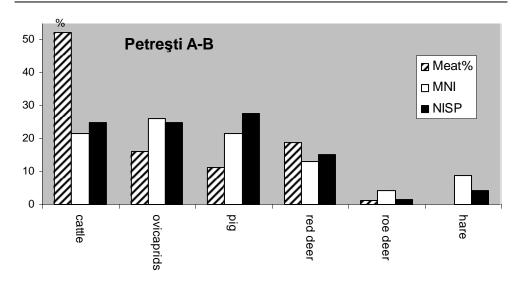


Fig. 6 – Taxa distribution in Petrești A-B level.

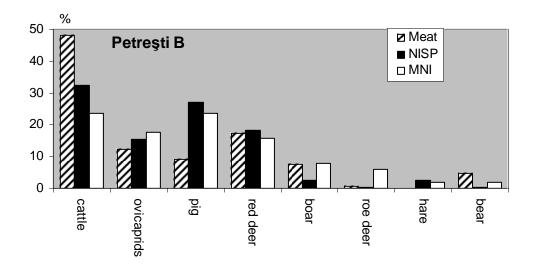
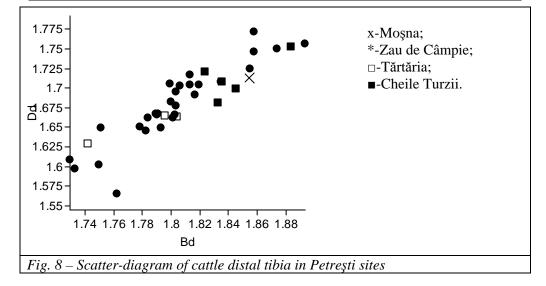


Fig. 7 – Taxa distribution in Petrești B level.



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				M1-		
Maxilla/sheep	Context	Dating	P2-M3	M3	LM3	Age
	S2/pit 8	P. AB	62	41.5	17	3-4 y
	S2/pit 9	P. AB	62	41.5	17	3-4 y
						1
Mandibula	Context	Dating	Taxon	M3	Age	
					old	
	S1/2/layer	P.B	Boar	47	mature	
	S7/layer	P.B	Cattle	40	36+	
	S7/house	P. B	Sheep	22	4-6 y	
	S2/Pit	D D	C1	22.5	22.24	
	2/level 2	P. B	Sheep	23.5	22-24 m	
A /7			T	DE		
Atlas	Context	Dating	Taxon	BFcr	BFcd	
	S2/layer	P.B	Pig	48	45	
	S10/layer	P. B	Sheep	42		
			-		CT D	• •
Scapula	Context	Dating	Taxon	SLC	GLP	LG
	S2/layer	P.B	Cattle		74	61
	S7/house	P.B	Cattle	21	64.5	56.5
	S1/layer	P.B	Pig	21	07	22
	S1/layer	P.B	Sheep		27	22
	S3/layer	?	Cattle		80	65
		D 1	-	DE	5.1	D 1
Humerus	Context	Dating	Taxon	BT	Bd	Dd
	S1/layer	P.B	Cattle	75	20.5	24
	S10/layer	P.B	Goat	27.5	28.5	24
	S7/layer	P.B	Red deer	60.5		
	S7/layer	P. B	Sheep	27.5		
D 11			T	DE	D	D
Radius	Context	Dating	Taxon	BFp	Bp	Dp
	S7/house	P.B	Cattle	74	01	46
	S2/layer	P.B	Cattle	74	81	41.5
	S1/pit 1	P. AB	Hare		10	6.5
	S2/layer	P.B	Hare Dad door		10	6 27
	S7/house Context	P. B	Red deer Taxon	Bd	Dd	37
	S2/pit 8	Dating P. AB	Cattle	ва 74	Da 44.5	
	-					
	S1/layer	P. B	Red deer	58	41	

Measurements cf. Von den Driesch, 1976

	Acta Tel	Tae Septe	incasti ensis,	, 1A, 2010	0	
Metacarpus	Context	Dating	Taxon	Bp	Dp]
	S7/layer	P.B	Red deer	50	36	
	S7/layer	P. B	Red deer	48	35	
	S10/layer	P. B	Red deer	44.5	30.5	
	Context	Dating	Taxon	Bd	Dd	
	S7/pit 7	P. AB	Red deer	56	35	
Metatarsus	Context	Dating	Taxon	Bp	Dp	
	S2/layer	P. B	Red deer	43.5	45	
	S10/layer	P. B	Red deer	45.5	45	
	S10/layer	P. B	Sheep	23.5	21.5	
	Context	Dating	Taxon	Bd	Dd	
	S7/House	P. AB	Red deer	47	32	
	S10/layer	P. B	Red deer	47.5	31]
Tibia	Context	Dating	Taxon	Bd	Dd	
	S2/layer	P. B	Cattle	71.5	51.5	
	S2/pit 2	P. B	Hare	16.5	10.5	
	S1/layer	P. B	Red deer	54	41	
	S2/layer	P. B	Red deer	52	40	
	S1/2/layer	P. B	Sheep	25	19.5	
Talus	Context	Dating	Taxon	GLl	GLm	Bd
	S4/pit 4	P. AB	Cattle		61	
	S1/2/layer	P. B	Cattle	60	54	38
	S2/layer	P. B	Cattle	69	62.5	47
	S7/house	P. B	Red deer	62.5	57.5	39
	S10/layer	P. B	Sheep	29	26.5	19.5
Calcaneus	Context	Dating	Taxon	GL	GB	
	S2/layer	P. B	Cattle	129	43	
	S7/layer	P. B	Hare	34.5	12.5	
	S7/house	P. B	Pig	75	22	
			T			
Centroquartal	Context	Dating	Taxon	GL		
	S7/house	P.B	Red deer	47		
		P. B	Red deer	48		
	S7/layer			i i		
	S7/layer S2/pit 2	Р. В	Red deer	45		
D 1 '	S2/pit 2	Р. В	Red deer	45		
Pelvis	-			i i		

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¹⁷¹

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S2/layer	P. B	Pig	27						
S1/layer	P. B	Sheep	22.5						

P. AB-Petrești AB; P. B-Petrești B; ?-unclear context