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CONTENT

DATA ABOUT ANIMAL EXPLOITATION AT RACOŞ – PIATRA DETUNATĂ / DURDUIA (COUNTY BRAŞOV, ROMANIA) IN THE BRONZE AGE AND HALLSTATTIAN HABITATIONS

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Keywords: *Bronze Age, Wietenberg Culture, Hallstatt, faunal analysis, animal.*
Abstract: *The article is presenting the statistical analyses on animal remains of Bronze Age and Hallstatt deposits from Racoş-Piatra Detunată and is presenting an comparative view of contemporary sites.*

"Piatra Detunată" / "Durduia / is a hill with an altitude of about 560 m, located on the left bank of the Olt River, halfway between localities Augustin and Racoşul de Jos. The hill was sporadic inhabited in Neolithic and very intense in the Bronze Age, Hallstatt and Latène (Costea, 2004, 52). The position was all-important to oversee the river Olt Valley, to Baraolt Depression and Homoroadelor Plateaus. Fortification from the Bronze Age, largely destroyed in the next age, is overlapped by two Hallstattian waves and a Dacian wall**.** At present, in relatively good condition are hallstattiene waves, unlike the Dacian wall which is kept on a height which varies between 1 and 1.6 m 1.7 m.

From the Bronze Age fortification a small faunal sample counting no more than 103 bones was collected; it comes from a dwelling - S2/2001 dated in the Bronze Age, Wietenberg Culture (Costea, 1999, 39-40). The bones exclusively belong to mammals, the most originating in **pig**. The 21 fragments (35.6 %) come from at least 6 individuals (40 %), killed in the following stages: two pigs at 7-9 months, one exemplar about 14-16 months, four exemplars upwards of 2.5 years. A single animal presumably reached an advanced stage, accounting the much worn dentition. The exemplar is a male, with a long upper third molar (39 mm in lengths) very closed to those of wild species. **Caprovines** rank the second with 17 fragments (28.8 %) from three individuals (20%), killed at 5-7 months, 12-16 months (a goat) and above four years (a sheep). A withers of 72.5 cm was estimated talus-basis, increased value but common, whereas the stature of the Bronze Age sheep in Romania was higher than previously (Haimovici, 1968, 190). For instance, the sheep from Otomani sites (NW Transylvania) had a stature of 61.4-69.3 cm (Haimovici 1987, 49; El Susi, 2002, 348), those from Noua Culture (SE Transylvania) 58.7-71.4 cm (El Susi 2002, 156). Unfortunately few data exist about sheep' withers exploited in Wietenberg settlements. It is possible they have had the

same waist high, as the sample from Cauce cave (Wietenberg level) shows it; a value of 68.9 cm was estimated (El Susi 2005, 121).

Table 1 – Species frequencies in the Bronze Age level

	Frgm.	%	MNI	%
Bos taurus	12	20.3	2	13.3
Sus domesticus	21	35.6	6	40
Ovis/capra	17	28.8	3	20
Equus caballus	1	1.7	1	6.7
Total domestic mammals	**51**	**86.4**	**12**	**80**
Sus s. ferrus	4	6.8	1	6.7
Cervus elaphus	3	5.1	1	6.7
Lepus europaeus	1	1.7	1	6.7
Total wild mammals	**8**	**13.6**	**3**	**20**
Total determined mammals	59	100	15	100
Splinters + ribs	44			
TOTAL SAMPLE	103			

12 remains originate in **cattle** post cephalic skeleton (20.3 %), coming from a sub-adult and a mature exemplar. From **horse** preserved a second phalanx of 45 mm in length, with a slender index of 84.2, coming from a relatively high individual with quite gracile legs. The wild mammal sample includes 4 wild boar bones (6.8 %), 3 red deer bones (5.1 %) and one of a hare (1.7 %). The fragments of **wild swine** originate in a single individual with a stature of 85.5 cm in average; is about a pair of talii (48.5 mm-GLl, tall – 85.9 cm) and a metacarpus III (79 mm-GL, tall – 84.7 cm). Whereas the stature of pig in Bronze Age is increased relative as well as the frequent interspecies cross-breeding, is not excluded the assignment of that animal to a mongrel. The three **red deer** fragments come from an adult individual. The **hare** is documented by a distal humerus. According to actual faunal information supposed the inhabitants from Racoş exploited chiefly domestic mammals, mainly the pork and mutton and secondary the beef. The by-products from small ruminants and cattle were also had in mind. The environment well forested advantaged an economy mostly focused on pig rising and sheep/goat (dairy products, wool). Cattle rising is on reduced scale least advantaged by environmental conditions. The game completed the diet, wild boar exploitation prevailing. Have stated an important amount of bones were not introduced in statistics inasmuch as come from a sector with mixed materials (Wietenberg + Hallstatt), „ from the bottom of the Dacian wall to core of hallstattian earth wave" (Costea, Bălos, 1996, 28).

The Hallstattian stronghold at „Piatra Detunată" is one of the most interesting objectives from SE Transylvania according authors of research. The two earth waves with an inner ditch form an arc of a circle, closing natural and anthropogenic terraces on which dwellings have high surface disturbed by the Dacian period**.** Fortification is located on a strategic place; it is believed that this was the headquarters of a local tribal chieftain (Costea, 2004, 76-77). Among the discoveries at the beginning of the first Iron Age at this point includes a sample fauna totalling 725 fragments, whose analysis will be presented below. He comes from campaigns, 1995 1997, 2000 and 2003 and was collected from the thickness of the waves and from two dwellings (loc. /1996-1997; loc. /2000)[64]. As revealed by data included in the table below the osteological sample consists almost entirely of mammal bones, there are only three shells harvested from the waters of River Olt. The sample consists of scraps of waste mainly of domestic mammals (87. 2%), among them cattle prevailing with 42.5 % (as fragments) and 25.6 % (as minimum number of individual). As frequency of NMI are readily brought forward by pig (26.4 %), a cause of the percentage difference between the two methods of quantification would be a reduced share of refuse jaws (14.4 %), an important criterion for estimating the MNI and kill-off patterns. There are four horn-cores of which one belongs to a female (dimensions at the base: 50/36/146 mm), the others ones coming from two immature males and one adult. The latter piece owns a portion of basic part with a diameter exceeding 79 mm; the piece is relatively massive, with morph-dimensional features what falls into the "primigenius" type. Complete long bones were not found so that there can not be to specify the stature of cattle at Racoş. Just remember that at this level chronologically cattle were of modest size with fewer individuals robust and higher. Thus, for cattle from the Hallstattian early settlement at Mediaş - "Cetate" has been estimated an average height of only 102.97 cm (Bindea, Haimovici, 2004, 119). Also, an average height of 103 cm was estimated for cattle from the Hallstattian site at Remetea Mare – "Gomila lui Gabor" (located in the Banat Plain) (El Susi, 1997, 50).

Table 2 – Species frequencies in the Hallstattian level

	Dwelling 1996/1997	Dwelling/ 2000	Wave	Total general	%	MNI	%
Bos taurus	21	60	161	242	42.5	31	25.6
Sus domesticus	14	32	78	124	21.8	32	26.4
Ovis/capra	10	11	54	75	13.2	21	17.4
Equus caballus		12	31	43	7.6	11	9.1
Canis familiaris	1	2	9	12	2.1	4	3.3
Total domestic	**46**	**117**	**333**	**496**	**87.2**	**99**	**81.8**

[64]Information Fl Costea coordinator archaeological research in this point, and thanks to whom this way for materials osteological and archaeological data

mammals							
Sus s. ferrus	2	7	14	23	4	7	5.8
Cervus elaphus	5	14	23	42	7.4	10	8.3
Vulpes vulpes	1	1	1	3	0.5	2	1.7
Lepus eurpaeus	1		1	2	0.4	1	0.8
Ursus arctos			2	2	0.4	1	0.8
Felis silvestris		1		1	0.1	1	0.8
Total wild mammals	**9**	**23**	**41**	**73**	**12.8**	**22**	**18.2**
Total determined mammals	55	140	374	569	100	121	100
Splinters + ribs	1	92	60	153			
MAMMALS	56	232	434	722			
Unio sp			3	3			
TOTAL SAMPLE	56	232	437	725			

Bone width measurements (few of them) show a population of cattle with many gracile animals (probably females) and few robust exemplars (males). Possible that this sex ratio reflects the gender composition of cattle herds in that time, the meaning of the prevalence of females compared to males (a normal ratio). On how the slaughter of the 31 individuals presumed, a percentage of 48.5 % represents the young and sub-adults and the remaining 51.5 % adults and matures. There are even cattle slaughtered after 7-9 years (four animals). The percentages suggest the use of cattle as the main source of meat and dairy products. Their killing for meat was done, either before reaching physical maturity, or after the reduction of economic performance, at an advanced stage.

The sample of **pigs** counts for 124 fragments (21.8 %) from the minimum 32 animals (26.4 %). About one quarter of their bones is fragments of jawbones which had allowed a detailing of the age of slaughter. According to them, up to a year was killed a small percentage, only 15.6 %, 53.1% between 1-2 years, 9.4 % between 2-3 years and 21.9 % over 3 years. According to these data it seems that the animals were mostly slaughtered between 1-2 years, more specifically between 1.5- 2 years, during which attained an optimum slaughter weight. There is, also an important percentage of animals kept as reproductive stock and a small share of young exemplars. It seems that there was a rational exploitation of species that assured beside cattle the source of meat of the community. Certainly the environmental conditions were suitable for a facile management of the species. With regard to withers height, on the basis of some astragalii were estimated values of 76, 76, 80.5 and 81.4 cm. The first two values characterise domestic individuals, the other two assign to boar females, by linking with similar materials from the Hallstattian early

settlement at Mediaş - "Cetate". The separation is quite arbitrary if we take into account the existing of cross-breeding (certainly) between pig and wild boar, in those times. High values of stature were estimated for suids from the Hallstattian early settlements of the Banat, a variation of 64.4 - 78.4 cm was found for the material from Remetea Mare and Vărădia (70 - 79 cm) (El Susi 1996, 126-127). Therefore, the pig exploited by the Early Iron Age communities seems as massive as the Bronze Age, with no sign of decrease of body parameters.

Caprovines sample totals 75 bones (13.2 %), of which 15 come from goats and 25 from sheep. The percentages suggest a relatively high frequency of goats in the livestock. Goat bones come from two sub-adult individuals and four adults. Sheep material is distributed in at least eight individuals of whom two were killed between 12 - 23 months and three between 3 - 5 years. Entering into account the bones without a sure assignment is obtained the following distribution of slaughter groups: a percentage of 66.7 % of young and sub-adult animals (14 individuals) and 33.3 % adult animals (7 individuals). Small ruminants killed at a mature stage were not identified. So the small ruminants rising aimed largely on meat consumption, unexcluding the milk and wool production. Estimations on the waist were not done in absence of long bones; the measurements on width of bone suggest medium-sized individuals.

43 pieces (7.6 %) were determined from **horse**, illustrating all body parts, which suggests the use of horse meat in diet. It estimated a total of 11 specimens (9.1 %), of which 7 animals (63.6 %) were killed 3.5 to 4 years and the rest over this limit; there is an animal slaughtered at 12 years and two over 15 years. Perhaps using of the horse was complex: riding, transport and food (the old or immature individuals).

Dog sample accounting for 12 fragments (2.1 %) completes the material of domestic segment from Racoş. Based on the seven jawbones is evaluated a number of 4 adult individuals (3.3 %), of which one of them has a mandible with a value of basal length of 205.4 mm, which corresponds to a dog of a high stature. Large-sized dogs lived in this epoch, as shows the faunal material at Medias "Cetate" (Bindea, Haimovici, 2004, 119), Remetea Mare (El Susi 1988, 158). Other measurements had highlighted medium-sized individuals also.

The bones of hunted mammals have a contribution of 12.8 % (73 pieces) in the sample. Among wild species, **deer** is ranked with 7.4% for 42 fragments and 8.3 % for 10 presumed individuals. His material is highly fragmented, illustrating almost entirely skeleton extremity; were identified only two jawbones, from a mature and a sub-adult (hunted around two years) exemplars. To be about a cutting of animals at the place of their capture, being brought into site just the significant parts for food, or the faunal sequence surprises a certain distribution of skeletal parts, dictated by the current stage of research. It is estimated that three animals were hunted as young a sub-adults and six ones have reached the adult stage (two were hunted at 4-5 years). For an individual was not considered the age. According to metric evaluations medium sized animals are in the majority.

In second place among the hunted species is placed the **boar** with 23 bones (4 %) from three immature individuals and four adults. Based on a talus was estimated a waist of 96.6 cm, values of 80.5 and 81.4 cm were assigned to wild species too. The metric data characterize medium sized exemplars, with some bones suggesting robust specimens robust, i.e. a distal tibia with GL. - 50.5 mm, a proximal radius, a scapula (see metric data). Definitely good woodland surroundings offered good conditions for the existence of robust mature specimens. Another wild mammal is the **fox**, from which two maxillary fragments and a complete radius preserved; the radius is 120.5 mm in GL. It is estimated a minimum of 2 individuals (1.7 %), hunted for their fur. The radius comes from a relatively small fox, less robust (probably a female) if we relate to similar material (Haimovici 1991, 155). Another species accidentally hunted is **hare** from which were identified a fragmentary scapula and a part of a pelvis from an adult specimen. Another species hunted for meat and fur is the **bear**, from which have resulted a portion of pelvis and a proximal phalanx, probably stored in fur, rotten over time. The last wild species found at the site is the **wildcat**, which has kept a radius, distal unfused, suggesting an immature body (GL is 113 mm). The presence of species in the area site links to existing well wooded hills that bordered the river course.

Making a synthesis on the above data one appreciates that domestic mammals were the basic food community. Enlightening is the value of domestic / wild ratio, 87.2 / 12.8 % as fragments and 81.8 / 18.2 % as MNI. The site location in a wooded environment, as evidenced by the prevalence of deer, wild boar remains together with the presence of elements typical of massive forests (bear, wildcat) promote the practice of hunting; however it was occasionally practiced focused on the elimination of possible predators, additional requirements for meat in the cold season or purchase of furs. Communities of the early Hallstatt raised both cattle for meat and milk, and pigs for meat and fat; the pork was a handy source of meat supply, relatively facile to keeping in conditions of a favourable biotope. Sheep and goats account lesser extent in the local economy. The horse was a significant component in the local economy, used in food as well as riding, carriage. Probably the aquatic resources as fish, molluscs were used in seasonal food. There are few faunal analysis for settlement of early Hallstatt from Transylvania, just the analyze of fauna from Mediaş - "Cetate" and partly the results from Mediaş - "Gura Câmpului" (Blăjan, Stoicovici, Georoceanu 1979, 35 42) may provide a basis for fauna from Racoş therein. Also there are some data on the fauna from Zau de Câmpie, it's about 123 determined bones, mentioned in a paper (Bindea, Haimovici, 2004, 120). To embark on a review of the fauna from early Hallstattian sites from Transylvania must take into account two aspects: the different quantitative value of analyzed samples (in this regard, with the exception of the slightly more numerous Racos sample - 725 frgm, the others are under 250 bones) and the conditions relatively different of settlements' location. If the settlements at Mediaş - "Cetate" and Mediaş - "Gura Câmpului were under the same bio-geographical location (placed at a low altitude of 300 m in the Târnave Plateau), in case of Racoş site (located in northern of Mountains Perşani) we talk of higher altitudes, over 500 m.

Overall all communities will be taken as basic food the exploitation of cattle, small ruminants and suidae. Their participation in supplying varies from case to case under both reports of no. fragments and as no. of individuals. If we take into account the frequencies as fragments, then their participation in diet is the maximum at Mediaş - "Gura Câmpului" (42.8 %) and Racoş (42.5 %) and lowers in the others, 26.4 % at Mediaş - „Cetate". As for Zau de Câmpie it states that "over half of the material belongs to cattle (Bindea, Haimovici, 2004, 120). To compensate, pig participation in supplying is higher at Mediaş - "Cetate" (25.2 %) and lower at Racoş (21.8 %) or Mediaş – "Gura Câmpului" (14.4 %). The horse has a role only at Racoş and Mediaş - "Cetate". Entering into question the criterion for measuring the frequencies as MNI, data change somewhat. Again cattle prevail at Mediaş - "Gura Câmpului" (30.1 %), at Racos having a somewhat smaller share, 25.6 %, and much less to Mediaş - "Cetate" (18.1 %). Pig dominates at Racoş (26.4 %) and Mediaş - "Cetate" (27.2 %). As a substitute small ruminants have significant frequencies at Mediaş - "Cetate" (24.2 %) and Mediaş - "Gura Câmpului" (21.1 %) and lowest in Racoş (17.4 %). Share hunting is significant at Mediaş - "Gura Câmpului" (20.9 / 27.7 % frgm. / MNI), a little lower at Racoş (12.8 / 18.2 %), while surroundings offered the best hunting. The game would have had a minor role at Mediaş - "Cetate", according to statistics (3.8 / 12.3 %). Range of hunted species was relatively diverse in surroundings of Mediaş, including deer, wild boar, aurochs, bear and roe deer and at Racoş as well, including: deer, wild boar, fox, hare, bear, wildcat. In the latter case the species composition includes mainly taxon (deer, wild boar, bear, and wildcat) typical of a well-wooded area with few open zones. Exploiting other food resources, from fishing, catching birds and molluscs (according fauna) will be made on a small scale or at all, although all sites were located near water. Some remains of molluscs were found at Racoş (3 pieces) and Mediaş - "Gura Câmpului" (a fish vertebrae, some shells of Unio sp.). The reserve required by small samples taken in question, generally speaking, the above data can not delineate types of settlements depending on the prevailing economic animal, probably every community in part operate in different natural resources offered by the environment, and the share of these resources vary in each case. Just as consistent analysis in many early Hallstattian settlements can further clarification.

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Methric data

Horn cores						
GL	**GD base**	**SD base**	**Circumf.**	**Taxon**	**Dating**	
	50	36	145	Bos taurus	Hallstatt	
	61.5	51	190	Bos taurus	Hallstatt	
	64	46	178	Bos taurus	Hallstatt	
	79			Bos taurus	Hallstatt	
70	37.5	21.5	107	Ovis/M	Hallstatt	
Maxila						
P2-M3	**M1-M3**	**P1-P4**	**M3/P4**	**Taxon**	**Dating**	
126	78	48	30	Bos taurus	Hallstatt	
			25.5	Bos taurus	Hallstatt	
			27.5	Bos taurus	Hallstatt	
		53		Bos taurus	Hallstatt	
			31	Bos taurus	Hallstatt	
			26	Bos taurus	Hallstatt	
			31	Bos taurus	Hallstatt	
			39	Sus dom.	Wietenberg	
			33.5	Sus dom.	Hallstatt	
			34.5	Sus dom.	Hallstatt	
	46		17	Ovic.	Hallstatt	
			18	Ovic.	Hallstatt	
			19	Ovic.	Hallstatt	
			18.5	Canis fam.	Hallstatt	
	17.5		18.5	Canis fam.	Hallstatt	
	21.5		18.5	Canis fam.	Hallstatt	
			18.5	Canis fam.	Hallstatt	
			13	Vulpes	Hallstatt	
Mandibula						
P2-M3	**M1-M3**	**P1-P4**	**M3/M1**	**Taxon**		
			34	Bos taurus	Hallstatt	

		50		Bos taurus	Hallstatt	
			31	Sus dom.	Hallstatt	
			34.5	Sus dom.	Hallstatt	
			35	Sus dom.	Hallstatt	
			36	Sus dom.	Hallstatt	
			45	Sus s. ferr.	Hallstatt	
			21.5	Ovic.	Hallstatt	
			23	Ovic.	Hallstatt	
76.5	53		26.5	Capra	Hallstatt	
			33.5	Equus	Hallstatt	
		38		Canis fam.	Hallstatt	
	86		24	Canis fam.	Hallstatt	
Scapula						
Ld	**SLC**	**GLP**	**Taxon**	**Dating**		
51.5			Bos taurus	Wietenberg		
56.5		54	Bos taurus	Hallstatt		
		50.5	Bos taurus	Hallstatt		
	39.5	32	Sus ferr.?	Hallstatt		
34	50.5	41.5	Sus s. ferr.	Hallstatt		
	30.5	25	Ovis	Wietenberg		
9	17.5		Lepus	Hallstatt		
Humerus						
BT	**Bd**	**Dd**	**Taxon**	**Dating**		
64			Bos taurus	Hallstatt		
69	78	76	Bos taurus	Hallstatt		
80			Bos taurus	Hallstatt		
		65.5	Bos taurus	Hallstatt		
		72.5	Bos taurus	Hallstatt		
33.5	40.5	42	Sus dom.	Hallstatt		

32	40	41.5	Sus dom.	Hallstatt		
31	41	41.5	Sus dom.	Hallstatt		
38	46.5	46.5	Sus s. ferr.	Hallstatt		
44	55	55.5	Sus s. ferr.	Hallstatt		
28.5	31	27	Ovis	Hallstatt		
	31	26	Ovis	Hallstatt		
	32	27	Ovis	Hallstatt		
30.5	32	26	Ovis	Hallstatt		
27	28	16	Ovis	Hallstatt		
	32	28.5	Capra	Hallstatt		
	31.5	34	Capra	Hallstatt		
	13.5	10.5	Lepus	Wietenberg		
Radius						
BFp	**Bp**	**Dp**	**Bd**	**Dd**	**Taxon**	**Dating**
72	79	38.5			Bos taurus	Hallstatt
		44			Bos taurus	Hallstatt
		43			Bos taurus	Hallstatt
		44			Bos taurus	Hallstatt
			76.5	54	Bos taurus	Hallstatt
	30	18			Sus s. dom.	Wietenberg
	32	22			Sus s. dom.	Wietenberg
	44.5	31			Sus s. ferr.	Hallstatt
			29.5	20.5	Ovis	Hallstatt
28.5	30.5	16			Ovis	Hallstatt
29.5	35	17.5			Ovis	Hallstatt
29.5	31.5	16.5			Ovis	Hallstatt
28.5		16			Capra	Hallstatt
30	30.5	16.5			Capra	Hallstatt
31.5	32.5	17.5			Capra	Hallstatt
73	79	46			Equus	Hallstatt
GL/120.5	10.5	6	13.5		Vulpes	Hallstatt
Metacarpus						

Bp	**Dp**	**Bd**	**Dd**	**Taxon**	**Dating**	
51	31			Bos taurus	Hallstatt	
55.5	32.5			Bos taurus	Hallstatt	
59	35			Bos taurus	Hallstatt	
	35			Bos taurus	Hallstatt	
		56	30	Bos taurus	Hallstatt	
		50.5	28	Bos taurus	Hallstatt	
		50	26.5	Bos taurus	Hallstatt	
		52.5	35.5	Cervus	Hallstatt	
Talus						
GLl	**GLm**	**Bd**	**Taxon**	**Dating**		
64	58	39	Bos taurus	Hallstatt		
66	60	43	Bos taurus	Hallstatt		
58	53	36.5	Bos taurus	Hallstatt		
67	61.5	44.5	Bos taurus	Hallstatt		
68.5	62	42	Bos taurus	Hallstatt		
64	59.5	39.5	Bos taurus	Hallstatt		
	66		Bos taurus	Hallstatt		
45.5?			Sus dom.	Hallstatt		
45?	39.5	26	Sus dom.	Hallstatt		
42.5	38.5	23.5	Sus dom.	Hallstatt		
42.5	38.5	25.5	Sus dom.	Hallstatt		
48.5	42	31	Sus s. ferr.	Wietenberg		
48	38	26	Sus s. ferr.	Wietenberg		
54	47.5	31.5	Sus s. ferr.	Hallstatt		
32	30.5	22	Ovis	Wietenberg		
61.5	57.5	52.5	Equus	Hallstatt		
56	51	37.5	Cervus	Hallstatt		
56.5	54.5	34	Cervus	Hallstatt		

59.5	55	36	Cervus	Hallstatt		
Mc. III/GL	**Taxon**	**Dating**				
79	Sus ferr.	Wietenberg				
Metatarsus						
Bp	**Dp**	**Bd**	**Dd**	**Taxon**	**Dating**	
50.5	49.5			Bos taurus	Hallstatt	
	45.5			Bos taurus	Hallstatt	
		51	29	Bos taurus	Hallstatt	
		51	26.5	Bos taurus	Hallstatt	
		56	29.5	Bos taurus	Hallstatt	
		61.5	30.5	Bos taurus	Hallstatt	
			30.5	Bos taurus	Hallstatt	
			27.5	Bos taurus	Hallstatt	
			28.5	Bos taurus	Hallstatt	
Tibia				**Pelvis**		
Bd	**Dd**	**Taxon**	**Dating**	**LA**	**Taxon**	**Dating**
55	42	Bos taurus	Hallstatt	32	Sus s. dom.	Hallstatt
61		Bos taurus	Hallstatt	33.5	Sus s. dom.	Hallstatt
61		Bos taurus	Hallstatt	43	Sus s. ferr.	Hallstatt
64.5	42.5	Bos taurus	Hallstatt	65	Equus	Hallstatt
50.5		Sus s. ferr.	Hallstatt	42	Canis f.	Hallstatt
25	17.5	Ovic.	Hallstatt	61,5	Cervus	Hallstatt
25.5	19	Ovic.	Hallstatt	13,5	Lepus	Hallstatt
53	38	Cervus	Hallstatt	**Calcaneus**		
53	38	Cervus	Hallstatt	**GL**	**Taxon**	**Dating**
54.5	39	Cervus	Hallstatt	124	Bos taurus	Hallstatt
54.5	41	Cervus	Hallstatt	129	Bos taurus	Hallstatt
56.5	39.5	Cervus	Hallstatt	133	Bos taurus	Hallstatt
				138	Bos taurus	Hallstatt
				42	Canis f.	Hallstatt
Equus caballus						

Ph I						
GL	**BFp**	**Bp**	**Dp**	**Sd**	**Bd**	**Dating**
					43	Hallstatt
83	49	55.5	37	35.5	44	Hallstatt
Ph II						
GL	**BFp**	**Bp**	**Dp**	**Sd**	**Bd**	**Dating**
47.5	43	49.5	33.5	40	47	Wietenberg

Fig. 1 – Bones of mammals

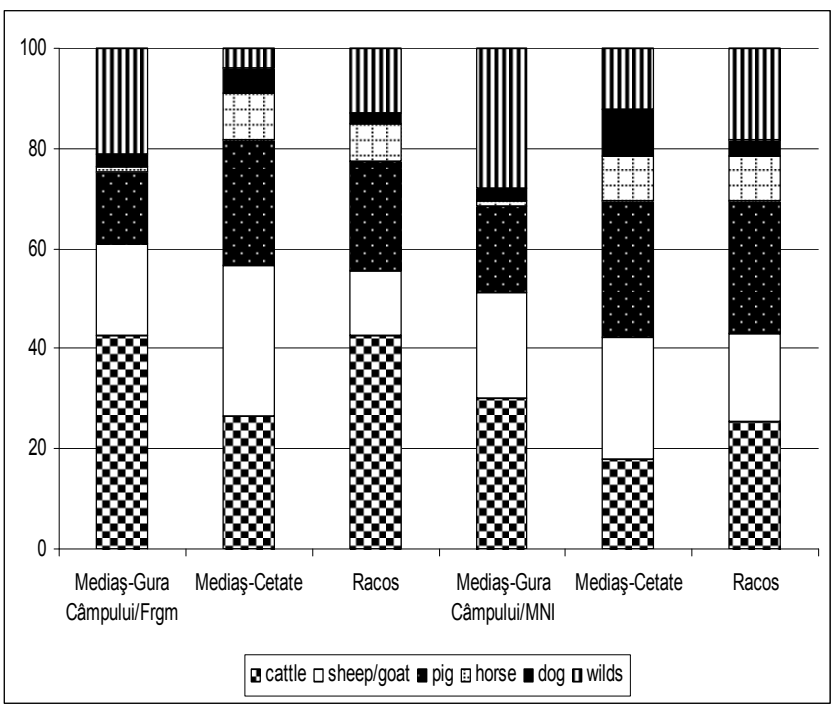

Fig. 2 – Animal frequencies in Hallstattian sites from Transylvania