

ANIMAL REMAINS FROM *VILLA RUSTICA* AT GÂRLA MARE (MEHEDINȚI COUNTY)

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The article deals with the faunal remains from a Roman villa rustica, dated to the 2nd/3rd centuries AD (Stîngă 1998, 37). The site is located on the left Danube bank, 65 km downstream of Drobeta Turnu Severin City. No sieving method was used for recovering the bones and it is very likely that a material selection has been practiced. Consequently, few small size fragments were preserved in the analysed sample. In spite of its scarcity (267 bones) the sample gave a lot of information with regard to the species used in consumption and the kill-off patterns during Roman epoch. The faunal assemblage counts 267 remains, of which 184 bones were collected from a big garbage pit (Table 1; fig. 1).

Table 1 - Frequencies of species

	General				Pit	
	FRGM.		MNI		FRGM.	
Bos taurus	124	46.4	9	36	97	52.7
Ovis/Capra	35	13.1	5	20	11	5.9
Sus domesticus	44	16.4	6	24	17	9.2
Equus caballus	62	23.2	3	12	58	31.5
Canis familiaris	1	0.3	1	3,7		
Domestics	266	99.6	24	96	183	99.5
Canis lupus	1	0.3	1	4	1	0.5
			2			
Wilds	1	0.3	1	4	1	0.5
TOTAL	267	100	25	100	184	100

The remainders are food and butchery refuses except those of dog and wolf. The sample of the pit represents an undisturbed deposit, in a good state of preservation. One third of the bones are reddish, chiefly those of the cattle and the horse. Some of them, inclusively those of the horse have blackened spots. Butchery marks are visible on a small part of bones, inclusively on those of the horse. It is worth mentioning that a lot of horse bones were chopped in a same manner as those of other species used for consumption. Two cattle scapulae and one of a horse have the "spina", cut and polished. The six main domestic taxa are present in the faunal spectrum. Cattle are, by far the most frequent species, with 46.4 % as fragments and 36 % as MNI (minimum number individuals). Horse ranks the second with 23.2 % as fragments, all remains originating only in 3 individuals. Consequently, its quota as MNI is underrepresented (12 %). Pig with 16.4 % on fragments (24 % on MNI) and small ruminants, with 13.1 % on fragments (20% on MNI) follow them. Only one bone comes from a dog. A single piece and a single species represent the wild animal category; it belongs to a wolf. It is fortuitously to discuss about the anatomical representation of elements. As already mentioned, the sample was partially selected. In case of the horse and the cattle it was predominately the bones of the meaty regions of the limbs; few elements of the skull are present. The pig remains are from skull and distal parts of legs. The sheep/goat bones derive from different parts of the skeleton.

Cattle dominates the proportions in all contexts summarizing 36-52 % of sample. Its bone collection includes an important number of measurable fragments. The most part of measurements was taken from the skeleton of the limbs. Few fragments of the skulls have been preserved, including a pair of horn cores, of which the left one is measurable. It comes from a female exemplifying the "brahyceros" type. The intercornual ridge is wavy; the piece is of small size, with thin and smoothed walls, curved forwards. The "brahyceros" type probably represents the cattle of aboriginal populations (Bokonyi 1984, 23). Some complete long bones suggest withers heights as follows: 116.5 cm (a radius of 271 mm), 129.7 cm (a metacarpus of 210 mm) and 125.8 cm (a metatarsus of 230 mm). Another radius of 245 mm in length, distal unepiphyseal, suggests a sub-adult individual. Its stature wouldn't have exceeded 120 cm at maturity. The first piece originates from a cow. A value of 11.7 of the slenderness index estimated on the metatarsus suggests also a female. Therefore, values of 116-126 cm were supposed to be applicable for cows during this period. Contrary, the second bone, with a value of 33 of the Nobis index belongs to a male, with a height of 129.7 cm. According to archaeozoological data "individuals of 120 cm or smaller withers heights as being from local breed cattle exceeding 125 cm can be considered improved Italian breed" (Bokonyi 1984, 28). Consequently two breeds of cattle are supposed to have been exploited by the villa rustica owners: small-sized bovines with withers heights below 120 cm, closed to those of the Dacian epoch. This type is common to Dacian sites of the Danube Valley (El Susi 1996, 113) and to Pojejena castrum actually (El Susi 1999, 73). Big-sized bovines with a stature exceeding 120 cm, found at Pojejena, Hinova (El Susi 1993, 217) are also emphasized. Generally, the cattle measurements are in the range of other Roman sites (Udrescu 1979, 107; Idem 1985, 67; Haimovici 1996, 395) even though they are placed in the lower part of the range. The age distribution point toward a dominance of subadult and adult animals in the site (Table 2.). Thus 11.1 % of the presumed animals were killed between 0-1 year; the percentage strongly increases to 66.6 % between 2-4 years. Only 22.2 % of animals were used all year long. The aforementioned proportion between age classes suggests that the villa rustica inhabitants used cattle for meat, milk, and draught power.

Sixty-two bones (23.1 %) of the Gârla Mare sample belong to a horse, of which fifty eight (31.5 %) come from the pit. Its remains are broken-up (with the exception of the distal parts of the legs) and scattered among the other mammal fragments. Most of the bony fragments come from meaty regions of the limbs; elements of the skull are fewer. Fragments (mandibula, maxilla, isolated teeth) of a skull originating in a mature/senile individual (the first presumed individual) were found in the pit. The pieces' dimensions fall into the middle range size of the Roman horse. A complete metatarsus, 262 mm in length comes from an individual with a withers height of 139.6 cm. A similar value (140.8 cm) was estimated on a complete tibia of 323 mm. The two long bones derive from a horse with a 140.2 cm withers height average, killed between 3-3.5 years (the second individual). The slenderness value for the metatarsal bone (13.9) suggests an individual with gracile extremities. A couple of femuri and a proximal phalanx (GL-85 mm) come from the same animal. A couple of radii originating from an immature horse (the third presumed individual) were also collected. In relation to horses from other Roman sites the animals from Gârla Mare are smaller. These individuals cannot be considered as typical examples of the Roman horse "because they hardly reach the lower limit of their size variation" (Bokonyi 1986, 410), but they are larger than the Dacian horse (El Susi 1996, 130).

Forty-four bones were assigned to a pig, by its percentage (16.4 %) falling into the third place. As MNI (24 %) it ranks as second. By contrary, the species is feebly represented in the pit sample, summarizing just 9.2 %. A withers height average of 70.4 cm (68-72.6 cm) was estimated for the pig individuals. In spite of these big values the species belongs to the same primitive type, characteristic to prehistory. The six presumed animals were killed at an adult-mature stage as the age class distribution discloses (Table. 2). Two of them are adult males, having in view the preserved strong tusks. Ovicaprines have a scanty material, totaling up 13.1

% on fragments and 20 % on MNI. They represent only 5.9 % in the pit. A pair of horn cores comes from sheep. The pieces are relatively robust, with a strong curvature backward and outward. Their morphology is typical for the "copper age" form: long, triangular in cross-section at the base flattened toward the tip. The left horn core was collected from the pit and its correspondent from the cultural layer. Two horn cores come from goats. They are of the "prisca" type and belong to females. One of them originates from a sub-adult animal and it is not measurable. The pieces lean outwards and are twisted. A proximal metacarpus was attributed to the subadult specimen also A proximal radius and its ulna (just epyphized) originate from a young mature goat (the second presumed individual). The other twenty-nine fragments were assigned to the undetermined Ovis/Capra category. Besides the two goats and one sheep, other two specimens were presumed: an animal killed at 7-9 months and another at a mature/senile stage. The few measurements of the long bones suggest animals relatively large as compared to the Dacian epoch (El Susi 1996, 300-302). Dog is represented by a single metacarpus collected from the cultural layer. A right mandible originates in an adult wolf.

Two bones with pathological changes worth to be mentioned: a right cattle mandibula (of a mature specimen) with an inflammation of the jawbone, on the alveolar row as a result of gum suppuration. This disease (periodontitis) (Bokonyi 1984, 113; Haimovici 1969, 216-218) also occurs in case of the horse. A left maxilla (that of the senile individual) is porous, with an inflammation along the M3 border. Teeth are irregularly worn, especially the third molar.

The bone assemblage from Gârla Mare is small and statistically insignificant. In this stage of the villa investigation it is not appropriate for comparisons either on species frequencies or on domestic/wild ratio. At any time the sample offers some information about animals kept around the site and their participation in the food supply. So beef made up a great part of the inhabitant's meat supply, followed by pork and mutton. It is difficult to assume that the horse was eaten. Surprisingly, most part of bones is fragmented, one scapula is polished, but no butchering, cutting or chopping signs were emphasized. Usually, the horse was not eaten during Roman times, with some exceptions (Bokonyi 1984, 102; Haimovici 1996, 401). Although the remainders of domestics dominate the faunal spectrum and the wild animal bones are missing, it is impossible to ascertain that wild mammals wouldn't play any role in the inhabitants' diet. To some extent, the scarcity of the sample would offer an explanation for the absence of hunted mammal remains. Red deer, wild swine, roe deer have been common species in the Danube area from Prehistory till modern times (El Susi 1996, 180-190).

Two cattle breeds are presumed have been exploited around the settlement: one with specimens of small stature, autochthonous type and another with improved animals. No improved animals were emphasized among sheep and pig, even if they had been found in other Roman sites along the Danube: Pojejena, Hinova. As for the age class-distribution, most part of the animals was slaughtered at an adult, mature/senile stage. The absence of juveniles is the result of a selection upon bones. This fact would suppose their use, which was primarily for meat and secondary for milk or draught power sources.

Table 2. Age-class distribution at Gârla Mare

BOVIDS		CAPRO VINES SUIDS		EQUIDES			
10-12 months	1	7-9 months	1/Ovic.	10-11 months	1	below 3-3.5	1
12-18 months	1	subadult	1/Capra	16-17 months	2	3-3.5 years	1
24-26 months	1	adult	1/Ovis	18-24 months	1	mature/senile	1
2.5 years	1	mature	1/Capra	2,5-3 years	1		
2,5-3 years	1	mat./senile	1/Ovic.	over 3 years	1		
3,5-4 years	2						
over 4 years	2						
Total MNI	9	5		6		3	

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Measurements cf A. von den Driesch, 1975.

Horn core				
Gl	Gd	Sd	C	
	48	57	171	cattle
310	48	36	145	sheep
	33	21,5	90	goat
108	28			goat

Mandibula						Maxilla	
Idgonion	P2-M3	P1-P3	M1-M3	M3/M1		M3	
	405	138	88	40	cattle	30	cattle
			90.5	39.5	cattle	31	cattle
	161	82	79	32	horse	32	cattle
			78		horse		
				23.5	sheep/g		
	98		47	29	wolf		
	86		62	29	pig		

Scapula				Humerus			
SLC	GLP	LG		Bd	Dd		
47	61	56,5	cattle	74	81	cattle	12-18 months
48,5	66,5	58	cattle	74		cattle	
50			cattle	68		cattle	12-18 months
51		58	cattle				
52	72	61.5	cattle				
53			cattle				
53	69	62	cattle				
54		60	cattle				
55	74	59	cattle				
	88	58	horse				

Radius							
Gl	BFp	Bp	Dp	Sd	Bd	Dd	
271				41	72	49	cattle 4-4.5 years
					70	47	cattle 3.5-4 years
245							cattle below 3.5-4 years
228							cattle below 1-1.5 years
	75	81	43				horse
					73	41	horse
	31,5	33	18				goat 3 years

Tibia							
Gl	Li	Sd	Bd	Dd			
			59	44	cattle		
			63	48	cattle		
338	323	43,5	72	46	horse	3-3.5 years	
			30	24	sheep/g		

Metacarp							
Gl	Li	Bp	Dp	Bd	BFd	Dd	
210		69,5	39				cattle
				58		32	cattle
				51	50	38	horse
				32		22	goat

Metatarsus							
Gl	Li	Bp	Dp	Sd	Bd	Dd	
230		48	48,5	27	55	32,5	cattle 2.5-3 years
		43	44				cattle
272	262	51	47	38	46,5		horse
		50	45				horse

Phalanx I							
GL	BFp	Bp	Dp	SD	BFd	Bd	
72		35					cattle
63		32					cattle
85	48	53	36	33,5	42	45	horse

Phalanx II							
GL	BFp	Bp	Dp	SD	Bd		
46	42	52	32	43	46,5	horse	

Phalanx III						
GB	BF	LF	Ld	HP		
68	45,5		48	43	horse	
69	44		55,5		horse	
77	46	28	52	42	horse	

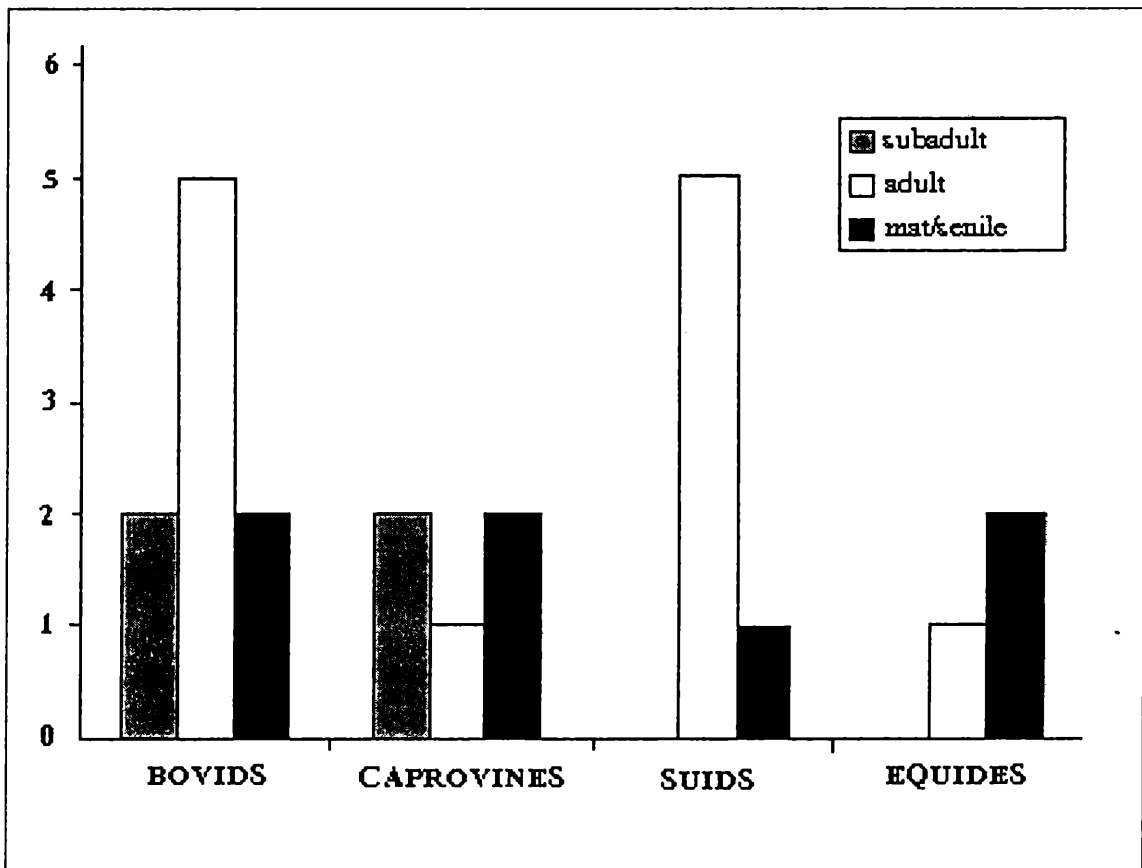


Fig. 2 The age class distribution at Gârla Mare