THE MAMMALIAN FAUNA FROM THE TEMPLE OF LIBER PATER IN APULUM

I. Elements of axial and apendicular skeleton (1999-2000)

(ABSTRACT)

After the short description of the analysed material, we tried to concentrate the data resulted from the analysis of each category of bones in tables. These tables contain elements connected with the identified species or the possibly present species in the sample under study, traces of human processing noticed on the bones, ages of slaughtering or death of the animals resulting from the stage of bone epiphysis suture and sizes or categories of estimated sizes.

1.1 Genus/species identified or possibly identified

Bos taurus	++
Cervus spp.	+
Ovis spp.	++
Capra spp.	+
Capreolus spp.	?
Sus Scrofa dom.	++
Sus Scrofa ferus	+
Equus caballus	++
Canis dom.	++

++ surely identified
+ possibly present
? uncertain identification

1.2 Traces of human processing

Bone/Species	Large ruminants	Small ruminants	Swine	Equids	Carnivores
Scapula	++	+			
Humerus	++	++	-		+/++
Radius	++	+	++		Not visible
Ulna	++	-			?
Metacarpus	++	+	-	-	-
Phalanx I	++			-	
Phalanx II	++			-	
Phalanx III	+			-	
Femur	+	+			-
Tibia	++	++	-		-
Metatarsus	++	++		-	
Calcaneus	++	+	++	Burnt	
Talus	+			++	

++ evident traces of cut/craft
+ possible cut/craft
- no traces

1.3 Age or categories of ages estimated

Bone /Species	Large ruminants	Small ruminants	Swine	Equids	Carnivore
Scapula	?	> 4.5 m	-	I-> 21 m. I - > 3.5-4 y	-
Humerus	> 1.5 y	> 9 m. 1 bone > 3.5 y	> 1.5 y		< 9 m
Radius	> 1.5 yi	> 3 m. 2 bones > 3.5 y	-		?
Ulna	> 3.5-4 y				-

	(1 bone)				
Metacarpus	> 2-2.5 y	?	> 2 y, 2 bones < 2y	> 1.5 y	?
Phalanx I	> 1.5 –2 y	> 6-9 m	> 2 y	-	
Phalanx II				-	
Phalanx III				-	
Femur	> 3-3.5 y (1 bone)	< 3.5 y			> 1.5 y
Tibia	> 2-2.5 y	> 2 y	> 2 y		> 1.5 y
Metatarsus	> 2-2.5 y	> 2 y (majority)	> 2 y ?	-	
Calcaneus	> 3 y	< 3 y	> 2-2.5 y	> 3 y	
Talus	?	?	?	-	

y= years
m= months

1.4 Estimated heights or categories of heights

Os/Species	Large ruminants	Small ruminants	Swine	Equids	Carnivores
Scapula	Slim majority, also massive		Small, relatively slim	Relatively, robust	
Humerus					1 bone medium-great, 1 bone submedium
Radius					
Ulna					
Metacarpus	1379 mm			Relatively great	Submedium, slim
Phalanx I				Medium – great	
Phalanx II					
Phalanx III					
Femur					Medium, relatively slim
Tibia		Medium			small-submedium, 40- 42 cm, robust
Metatarsus	1200-1460 mm	64.5-70.9 cm, Ovis, female			
Calcaneus	Medium		55-59 cm		
Talus			68-71 cm	Medium-great	

1.5 Data concerning the identified species

1.5.1 Large ruminants

Corroborating the data from the descriptive part of the analysis we could conclude that the animals were used in human consumption (as food for people).

Among the identified bones there seem to be bones belonging to cervides, but there are no bone identifications which could confirm this affirmation.

The slaughtering age at the most animals is above two years. There are also bones that indicate 3.5-4 years, but their proportion is insignificant so they can not allow conclusions.

The calculated sizes or approximate ones reveal the existence of a medium-sized bovines (1200-1400 mm) with a relatively supple constitution.

The animals identified at Apulum are similar with the animals existing and typical for the region and historical age (*Gudea-Gudea, 2000*, p.241-278). These bovines constitute the result of crossing between the local races (whose size used to be smaller) and the imported, improved ones. It seems that the animals were destined for utilitarian uses (work), milk production and lastly for meat.

1.5.2 Small ruminants

Their destination was both utilitarian-productive (milk, wool) and alimentary. In support of this affirmation stand the data suggested by the slaughtering ages (indicated by most bones) situated above two years.

Among the searched bones there is no evidence for the animals belonging to Capreolus genus. The accomplished measurements and the anatomical characteristics of the material assigned to ovicaprines permit the supposition that in the analysed sample there were also individuals belonging to the Capra genus.

The calculated heights for the ovine indicate in more cases 65-70 cm, a normal situation for the effectives from Roman period. Animals of this type appear as a result of improvement of local species through crossing with superior, improved ones *(Gudea-Gudea 2000,* p. 241-278).

1.5.3 Swine

The observations made on the material indicate evident traces of processing, and hence the logical conclusion that animals had been also used in alimentation. The slaughtering age, in most cases is 2-2.5 years.

Calculated heights are 55-65 cm.

As a conclusion we can state that the discovered swine population is rather heterogeneous, with heights between 55-65 cm. Most bones indicate a domestic species, with rather primitive characteristics and a slow speed of breeding. In support of this affirmation stand also the data concerning the slaughtering age of animals, which is above 2.5 years, there are, of course, animals slaughtered at a younger age (1-1.5-2 years) and even above, but the proportion of such animals is rather small. The data resulting from our analysis show that in the case of this species preoccupations for improvement were reduced, being used a tardive race, with slow breeding and most probably a semiextensive system of breeding.

1.5.4 Equids

The observations do not show traces of processing. In case of tarsal bones these traces are evident, but they don't allow to conclude that the animals were used in human alimentation.

The age of death is above 2-3 years. The heights could not be calculated, but somatoscopical appreciations permit the estimation of a relatively large, robust animal.

As a general conclusion we can not say that the animals were used in alimentation (although this thing is suggested by a series of other works), the traces of processing could be present owing to later attempts to use the bones for household and utilitarian purposes. The presumed destination (having in wiev the affirmations concerning heights) is traction, so the use of animals for work and riding.

1.5.5 Canidae

Traces of processing are not found at most bones. Only one bone (one from the few whole ones) shows traces of cutting whith a sharp instrument, fact that does not exclude the possibility of use in alimentation (fact known from written sources- *Luscu 1965*).

The estimated age of death is not conclusive (higher than 1.5 years) due also to the fact that the number of bones that suggests this age is very reduced.

The estimated hights show clearly the existence of several morphologicel types.

Having in view the fact that the MNI (minimum number of individuals) provides only the minimal limit of the number of existing individuals, the real number might much bigger, we can affirm with certainty that the canine population is so diverse due also to the existence of some well defined, selected races (individual sized 40-42 cm, robust constitution, short and torsioned limbs having a utilitarian or ornamental destination), but most bones indicate the existence of an ordinary dog, sized submedium-medium, relatively supple whose destination seems to have been utilitarian (guarding).