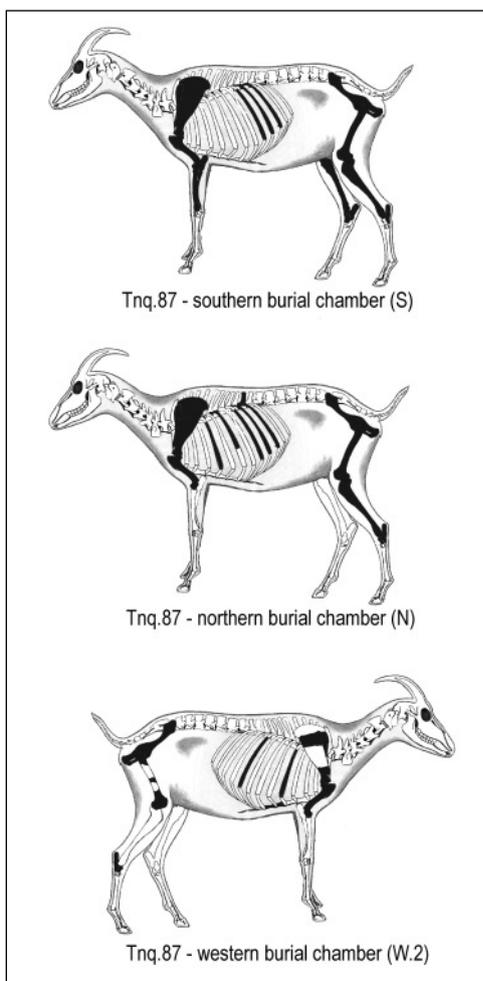


# FAUNAL REMAINS FROM THE TANQASI BURIAL GROUND, SEASON 2006

Marta Osypińska\*

Excavations of tumulus tomb Tnq.87 at the Tanqasi burial ground in 2006 yielded three assemblages of faunal remains originating from three separate chambers (S, N and W.2). Altogether 151 bone fragments were examined. The state of the remains is good, but the extremely desiccated conditions of deposition have left the bones brittle and eroded on the surface. All fragments of the individual bones were examined in sets, which gave the opportunity to count the number of original remains deposited in the tomb. There were most likely 16 bones in Chamber S, approximately 10 in Chamber N and about 24 in Chamber W.2.

The skeletal material was identified by species and anatomical part; the remains were examined to determine also age at death of the animals and morphology. No intentional cut marks were observed. Bone measurements follow data given in von den Driesch (1976) and Lasota-Moskalewska (1997). Slaughter age of cattle and goats was established on the grounds of data cited by A. Lasota-Moskalewska after Kolda (1936). Height at the withers for the cattle was calculated using variables established by J. Matolcsi (1970, cited after von den Driesch, Boessneck 1974). A comparative analysis of the cattle and goat remains was based on osteometric data. The goats from Tanqasi were compared with the assemblage discovered during PCMA and Patrimonium



*Fig. 1. Morphology of goat remains from the three chambers of tumulus tomb Tnq.87*

\* Institute of Archaeology and Ethnology, Polish Academy of Sciences (IAE PAN), Poznań branch

Table 1. Goat remains from the three chambers of tumulus tomb Tnq.87 (osteometrical data according to the von den Driesch (1976) system of measurement)

Tnq.87 Bones	Chamber S Number of fragments	Osteometry	Chamber N Number of fragments	Osteometry	Chamber W.2 Number of fragments	Osteometry
<i>Cranium</i>						
<i>Mandibula</i>						
<i>Vertebrae</i>			3 frs			
<i>Costa</i>	3 frs		10 frs		21 frs	
<i>Sternum</i>					1 fr	
<i>Scapula</i>	5 frs – left & right	SLC-20, GLP-32; SLC-20, GLP-31	6 frs – left	GLP-32	4 frs	
<i>Humerus</i>	4 frs – left & right	Bd-31, Bd-31	2 frs – left	Bd-29		
<i>Radius</i>	3 frs – left & right	Bp-32	3 frs – right			
<i>Ulna</i>	3 frs – left & right					
<i>Ossa carpi</i>						
<i>Ossa metacarpalia</i>						
<i>Pelvis</i>			6 frs			
<i>Femur</i>	2 frs – right		9 frs – left & right		2 frs	
<i>Patella</i>	9 frs					
<i>Tibia</i>	3 frs – left & right		4 frs – left		1 fr	
<i>Talus</i>	1 fr – right	GLI-30, GLm-29, Bd-19	2 frs – left	GLI-30, GLm-28, Bd-18	3 frs	
<i>Calcaneus</i>	1 fr – right	GL-55	3 frs		1 fr – right	GL-56
<i>Ossa metatarsalia</i>						
<i>Phalanx proximalis</i>						
<i>Phalanx media</i>						
<i>Phalanx distalis</i>						

Table 2. Cattle remains from chamber W.2 of tumulus tomb Tnq.87 (osteometrical data according to the von den Driesch (1976) system of measurement)

Bones	Number of fragments	Osteometry
<i>Cranium</i>		
<i>Mandibula</i>		
<i>Vertebrae</i>		
<i>Costa</i>		
<i>Scapula</i>	14 frs – left & right	GLP-59; SLC-48
<i>Humerus</i>	1 fr – left	Bd-72
<i>Radius</i>		
<i>Ulna</i>		
<i>Ossa carpi</i>		
<i>Ossa metacarpalia</i>		
<i>Pelvis</i>		
<i>Femur</i>	6 frs	
<i>Patella</i>		
<i>Tibia</i>	3 frs – right	Bd-57
<i>Talus</i>	1 fr – right	GLI-64, GLm-59, Bd-41
<i>Calcaneus</i>		
<i>Ossa metatarsalia</i>		
<i>Phalanx proximalis</i>		
<i>Phalanx media</i>		
<i>Phalanx distalis</i>		

Foundation excavations at es-Sadda in the Fourth Cataract region (studied by the author, cf. Osypińska 2007). No such comparison was possible for the cattle remains for lack of chronologically homogeneous osteometric data, hence the results were juxtaposed with measurements made for material from Old Dongola (Osypińska 2004: 224-230).

The Tanqasi assemblage contained two species of mammal remains (Mammalia) – goat (*Capra aegagrus f. domestica*) and cattle

(*Bos primigenius f. domestica*). The number of one-name bones determined the number of individuals as being at least three goats and one individual of cattle.

Anatomy-wise, the remains included only bones from meat-rich cuts of the carcass, mainly the proximal parts of the limbs. There were no skull fragments, teeth or distal parts of limbs.

The assemblage from the southern chamber (S) comprised 36 fragments of bones identified as belonging to a goat

Table 3. Comparison of osteometric data for goat remains from two chronologically homogeneous sites (osteometrical data according to the von den Driesch (1976) system of measurement)

Bones	Tanqasi	es-Sadda
<i>Scapula</i>	<b>SLC-19, 16, 20</b>	SLC-19, 20
	<b>GLP-30, 30</b>	GLP-30,32,32
<i>Humerus</i>	<b>Bd-32</b>	Bd-29, 31, 31
<i>Radius</i>	<b>Bp-28, 29, 30, 31</b>	Bp-32
<i>Calcaneus</i>	<b>GL-47, 58</b>	GL-55, 56
<i>Talus</i>	<b>GLI-30,29,30</b>	GLI-30,30
	<b>GLm-27, 28, 28</b>	GLm-28,29
	<b>Bd-18, 18, 19</b>	Bd-19, 19

[Table 1, Fig. 1]. They made up at least 16 different bones. Goat remains from the northern chamber (N) counted 49 small fragments which turned out to belong to at least 11 bones. The chamber also yielded 10 fragments of ribs from a big ruminant, most probably cattle. The assemblage from the western chamber (W.2) was the most varied, containing both goat and cattle remains. Altogether there were 59 osteological fragments. Of these, 36 belonged to cattle [Table 2] and only 23 to goats.

All the goat long bones came from morphologically immature animals in which the diaphysis and epiphysis had not fused yet. The age at slaughter of the animals was determined based on the degree of ossification of the epiphysial cartilage, although the method indicates only the age before which a given animal was killed. In the case of goats from Tnq.87, the remains came from animals slaughtered at approximately the same age. They were not very young animals – not less than five months, but no more than three years. As for the cattle bones, they represented

a mature animal. The diaphysis and epiphysis were permanently fused, meaning that the animal at death was more than four years old (Kolda 1936).

The fragmentarily preserved long bones permitted an osteometric evaluation of mainly the epiphysis of nine long bones of goats and five of cattle. A comparative analysis of the results was carried out in order to evaluate the morphotype. The osteometric data from Tanqasi was compared with the finds of goat bones discovered among others in the post-Meroitic tumuli in es-Sadda (Osypiński 2008). It turned out that not only was the age at death of the animals similar, but also the morphotype did not differ [Table 3]. This indicates that despite the considerable distance separating the two sites (c. 130 km), the same variety of goat was bred and for some reason the inhabitants preferred such animals for the funerary offerings in the two cemeteries.

To recognize the Tanqasi cattle morphotype, it was necessary first to recompose the fragmented scapula and

humerus<sup>1</sup> in order to measure the long bones in order to calculate the approximate height at the withers: 113.8 cm. The cattle were therefore of average size, corresponding perhaps to the African short-horn variety once common in northern Sudan (e.g. Grigson 1999; Osypińska 2004a; Osypińska 2004b) and still occur-

ring in this region (Lasota-Moskalewska 2005).

No evidence of tool cuts resulting from carcass sectioning were noted on the bones, no cutting into smaller pieces or filleting from the bone. In a few cases there is proof of rodents gnawing at the bones, most likely already after deposition in the tomb.

## CONCLUSIONS

The assemblage of faunal remains from the chambers of the tumulus tomb Tnq.87 excavated at Tanqasi differed completely in terms of species from the deposits examined in the tombs at Hammur Abbasija (author's unpublished report from Mahmud El-Tayeb's excavations for the SDRS project in 1998/1999) and el-Zuma (Osypińska 2005: 404-407). Despite this, there appears to be some similarity of criteria for choosing the species of animals. In each of the three assemblages, there was one large animal (cattle or camel) and two or three smaller ruminants (sheep or goat). In details, however, the Tanqasi group is clearly distinct. For the first time, remains of cattle and goat were noted in the chamber of a tumulus. The relatively large number of individual animals is also noteworthy. The deposited remains belonged to at least three goats and one cow. On the other hand, the meat offerings in the tomb at Tanqasi appear to be of lesser quality than in el-Zuma, because beef from an animal of advanced age and practically mature goats could not compare with lamb or young camel meat. The material from the post-Meroitic cemetery at es-Sadda was comparable in terms of species composition, as the chambers there

contained exclusively goat bones. The anatomical make-up and the slaughtering age were very much like those observed in Tanqasi.

The anatomical distribution of the Tanqasi material is very similar to the assemblages from el-Zuma and Hammur. The faunal remains from the chambers represent exclusively parts of the carcass with the greatest abundance of meat. Parts of lesser consumptional attractiveness, like ribs and vertebra, were not numerous in the assemblage.

On the grounds of a comparative analysis of the remains, it can be said that the meat deposited in tomb Tnq.87 came from the Sudan Desert variety of goat and from African shorthorn cattle.

The presence of cattle remains may reflect the prestigious character of these animals, in which case it would explain why a less valuable individual had been offered, or else the environmental situation. After all, cattle requires much better fodder or feeding places than camels or small ruminants. Cattle breeding is also connected with a settled way of life (in this part of Sudan), while camels and small ruminants would suggest an economy based on a nomadic-pastoral type of economy.

1 My thanks to Piotr Osypiński who pieced these bone remains together with great dedication.

## REFERENCES

- Driesch, A. von den  
1976 *A Guide to the Measurement of Animal Bones from Archaeological Sites*, Peabody Museum *Bulletins*, 1, Peabody Museum Press, Harvard University
- Driesch, A. von den, Boessneck, J.  
1974 *Kritische Anmerkungen zur Widerristhöhenberechnung aus Längenmaßen vor und frühgeschichtlicher Tierknochen*, *Säugetierkundliche Mitteilungen*, 22, München
- Grigson, C.  
1999 *Bos Africanus* (Brehm)? Notes on the archaeozoology of the native cattle of Africa [in:] *The Origins and Development of African Livestock*, Kevin C. MacDonald & Roger M. Blench (eds), London and New York
- Kolda, J.  
1936 *Srovnovací anatomie zvířat domácích se zřetelem k anatomii člověka*, Brno
- Lasota-Moskalewska, A.  
1997 *Podstawy archeozoologii. Szczątki ssaków*, Warszawa, PWN  
2005 *Zwierzęta udomowione w dziejach człowieka*, Warszawa, PWN
- Osypińska, M.  
2004a Animal bone remains from Old Dongola. Osteological material from building B.I. on Kom A, *PAM XV [=Reports 2003]*, 224-230  
2004 Faunal remains from the Banganarti church, *PAM XV [=Reports 2003]*, 261-267  
2005 Animal bones from the excavations at Ez-Zuma, *PAM XVI [=Reports 2004]*, 404-407  
2007 Faunal remains from the post-Meroitic cemetery in es-Sadda 1 (season 2005), *PAM XVII [=Reports 2005]*, 364-367
- Osypiński, P.  
2008 Es-Sadda 01. Excavations of a post-Meroitic cemetery (two seasons), *PAM XVII [=Reports 2005]*, 348-367.