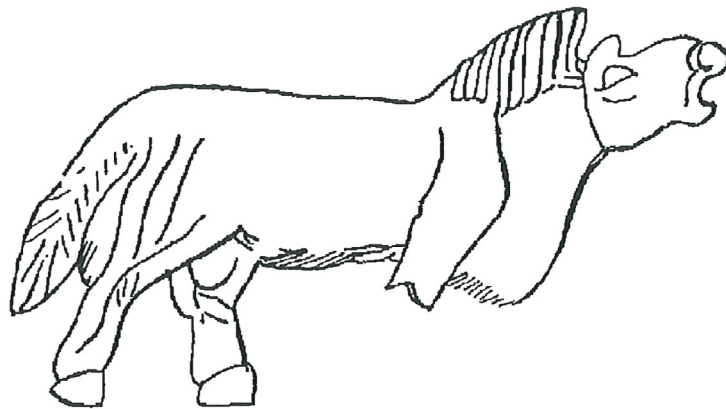


ARCHAEOZOOLOGY OF THE NEAR EAST IV B

Proceedings of the fourth international symposium on the
archaeozoology of southwestern Asia and adjacent areas

edited by

M. Mashkour, A.M. Choyke, H. Buitenhuis and F. Poplin



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Przewalski from Susa (nacre – mother of pearl)

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FAUNAL REMAINS FROM TELL AFIS (SYRIA)

Barbara Wilkens¹

Abstract

The remains under study come from all sectors excavated since 1987 whose levels are dated from Late Chalcolithic to Iron III. As it concerns domestic mammals, the percentages of caprovines and cattle are quite constant, while pig is more variable and seems to decrease after the Late Chalcolithic and return to an higher percentage during the Iron Age. The differences among the wild fauna seem to be in connection with environmental variations, and during the Late Chalcolithic the species living in moist milieu are more frequent while in the upper levels the species of dry steppe are abundant. The differences in the faunal associations are conditioned also by social factors and often we can note variations in the percentages between remains coming from different sectors of the same period. The mammalian remains are very abundant but many bird bones, reptilia and shells have also been found. The greatest part of shells are imports from the Mediterranean sea and only a few in the Iron Age levels come from the Indian Ocean.

Résumé

Les restes étudiés ici proviennent de tous les secteurs fouillés depuis 1987, dont les niveaux sont datés du Chalcolithique final à l'Age du Fer III. En ce qui concerne la faune domestique, les pourcentages de caprinés et de bœuf restent relativement constants, alors que ceux du porc semblent décroître après le Chalcolithique et remonter à des taux plus élevés pendant l'Age du Fer. Les variations perçues pour la faune sauvage semblent être liées aux fluctuations environnementales. En effet, au cours du Chalcolithique final, les espèces vivant dans les milieux humides sont plus fréquentes, alors que dans les niveaux supérieurs ce sont les espèces de milieux aride et steppique qui sont quantitativement plus importantes. En outre, les différences dans les associations fauniques sont aussi influencées par des facteurs sociaux qui se voient dans les divers secteurs de la même période. Même si les vestiges mammaliens sont prédominants dans la faune de Tell Afis, les ossements d'oiseaux et de reptiles ainsi que les restes de mollusques ne sont pas négligeables. La majeure partie de ces derniers ont été importés des côtes méditerranéennes. Seul, un petit nombre d'entre eux, à l'Age du Fer, proviennent de l'Océan Indien.

Key Words: Mammals, Molluscs, Holocene, Syria

Mots Clés: Mammifères, Mollusques, Holocène, Syrie

Introduction

The material which has been studied comes from various excavations in the acropolis and the lower part of Tell Afis (Idlib) in Syria. It was a centre of a certain importance situated near the modern-day Saraqeb, some 10 kms from Tell Mardikh. While the remains from the lower city (sector D) have been dated approximately to the Iron Age, the acropolis excavations have exposed levels which date from the late Chalcolithic to Iron Age III. In sector E1, in particular, which is situated on the western slopes of the acropolis, a stratigraphic sequence which goes from the Late Chalcolithic to Iron I has been recorded. There is notable variation in the percentages of the fragments in the various levels, related to environmental, climatic and economic change. Additional differences occur between various sectors of the same chronological phase probably due to different use of the areas.

Given the characteristics of the territory, which today still is suitable for the rearing of caprovines, in all periods these animals have been of notable economic importance, with a percentage of number of fragments which often exceed 50%. In all phases sheep prevail over goats, even though the percentage of caprovines identified at a specific level is low. Bovines, generally old and therefore presumably connected with agricultural exploitation regarding mainly cereals, are on the whole present

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in low percentages, which range from 12.83% of the fragments in the Late Chalcolithic, to 21.68% in Iron Age II. The pig situation is much more variable, both in chronological and spatial terms; in some periods its importance becomes minimal.

Economy and animal husbandry

In the Late Chalcolithic the percentage of caprovines is particularly high, while those for pigs and bovines are low. The economy would therefore appear to be bound to shepherding, with agriculture continuing in a secondary role. Mortality studies have revealed a certain abundance of young animals, while amongst the adults, medium age prevails. As evidence of new-born animals is not present we may infer that interest was mainly in the production of meat and wool.

Other animals present in the Late Chalcolithic are the dog and horse; the latter was identified by a very limited number of fragments (teeth) and it is perhaps still an animal which is not common; while amongst small stature equids only the onager has been identified.

As in the later phases, the domestic bovines are generally old, used for work.

In the Bronze Age a sharp fall seems to have taken place in the importance of the pig, this animal seems to become of interest again only from Iron Age I onwards. The lack of interest in the pig may be due to various factors, perhaps even environmental ones. The diminishing supplies of water may have had an influence on the quality of husbandry and on the health of the animals which show, in all levels, very high pathology percentages.

The caprovines maintain their importance reaching a maximum in the Middle Bronze Age, while the percentage of the bovines is highest in the Early Bronze Age IV; it is in the latter period that the donkey appears. Thus the importance of shepherding seems to increase, although the bovine percentages remain the same and in Early Bronze IV rise as far as 18%. The presence of the donkey must certainly have influenced considerably the transport of goods; even over notable distances and in semi-arid zones, and for all kinds of heavy work.

From Iron Age I onwards another domestic species makes its appearance: the camel, large in stature when compared to the modern dromedary. The camel is found in low percentages throughout the whole of the Iron Age. Generally speaking one may say that starting from Iron I an increase in the pack animals (camel, donkey and horse, as well as other undefined equids) may be noted, which could be linked to the growing importance of the city as a commercial settlement and centre for caravans. The use of equids as food remains doubtful and whole bones may easily be found.

Pit 1008 in Sector G (Iron Age II and III) is very important from the point of view of faunal remains as a large quantity of material in a good state of preservation has been recovered, including numerous skeletons of dogs articulated.

In the Iron Age the pig re-acquires importance, above all in certain sectors, not withstanding the poor quality of these individuals which continue to present very high pathology percentages. The bovines reach their highest percentage in Iron Age II. Two vertebral fragments identified as *Bos indicus* have been recovered from pit 1008 in Sector G. This bovine, which is difficult to distinguish in fragmented material, was described by Pliny for Syria and has been noted in late iconographic sources. The caprovines are still high in percentage, although in some cases lower than in preceding levels. In Iron Age I the finding of two deposits of astragali of caprovines in Sector E is noteworthy. The majority of the astragali are not worked and belong mainly to large caprovines.

For the different phases of the Iron Age we possess more information about mortality in comparison to the preceding periods. Amongst bovines the butchering of calves has been recorded, even at a very young age, although adults and elderly individuals continue in importance. Among the pigs, the majority is composed of young animals, in various stage of life, including new-borns.

Among the caprovines middle-aged adults continue to prevail, while in Iron Age I and III young animals between 6 and 9 months are common. Therefore the exploitation of the flock seems to be directed towards the production of meat and wool.

Morphological Characteristics

There do not seem to be variations in time for the principal domestic species in terms of morphological and metrical characteristics.

While in the levels of the Late Chalcolithic and Bronze Age of the Sector E only rare remains of dog are present, in the Iron Age in more or less completely articulated skeletons are frequent, above all in Sector G, which must have included areas of refuse disposal. The existence of various breed differences seems to be apparent. The majority is comprised of individuals with characteristics which were not selected in any particular way, with medium length and slightly shortened muzzles. In addition, individuals which were slightly more robust have been found, with a stature generally larger, and a small group, of at least five individuals, of light and very slim build, with lengthened muzzles and spaced teeth. For one of these, a medium height of 48 cm has been calculated.

On the whole the height of the dogs ranges from 47 to 58 cm, though for some individuals, with a slighter build, calculation of height was not possible.

The pigs were of small and medium size, with heights which range from 51 to 75cm, while the height of the wild boar reaches 97cm. The cranium is small, with a shortened snout, reduced diastema, crowded premolars and in some cases turned. Often the first pre-molar is missing. The post-cranial skeleton is gracile. The lack of interest in pig which is quite evident in some periods, may be due to various causes. The decrease in availability of water may have influenced the quality of animal husbandry practices and the health of the animals. The fact that in all the phases poor quality individuals occur, of medium though slight build, and characterised by numerous anomalies and diseases is significant. From the Late Bronze Age onwards signs of porotic hyperstosis are frequent. In certain cases these comprise ca. 60% of the crania and signs of healed injuries to the frontal and parietal bones are frequent; these are probably due to blows and mistreatment by man rather than wounds caused by other animals. This fact may lead us to suppose that pigs lived close to the dwellings in such a way as to cause disturbance. A delay in the fusion of some sutures in the cranium and in the mandibular symphysis has been noted.

The bovines have characteristics similar to the European forms of the *brachyceros* type, with thin horns of short or medium length; their stature is medium or small, with heights varying from 111 to 125 cm. The cases in which it has been possible to measure height females or possibly castrates were studied. We have no heights for males. The remains of juvenile animals are more frequent in the later phases, though the majority of the remains belong to older animals.

The sheep are of medium-large build, with heights which often reach 70 or even 80 cm (the variability ranges from 57 to 81cm). The common sheep type seems to be characterised by large horns with a subtriangular cross-section for the males, while the females are hornless or with little horns.

In goat both sexes possess horns, though those of the male are larger and more robust, with a flattened cross-section and are notably curved. Heights range from 59 to 71 cm.

Only from the Early Bronze IV onwards may one observe the sporadic presence of larger sheep and goats of very strong structure, which have been identified, questionably as a wild subspecies, or anyway as a domestic form which is distinguished from the mass of ovine bones, although as a result of the fragmentary nature of the remains it is often impossible to take measurements.

With regard to the equids, the excessive fragmentation impedes the observation of morphological characteristics of the cranium. The horses seem rather robust, with a height of 122 cm in Iron Age I, 130 and 142 in Iron Age II, and therefore larger than those existing in other areas of the Mediterranean. The donkeys also seem to be of medium-large stature, though they have a slight build.

The wild fauna

The wild fauna, quite rare though varied as regards the presence of species, displays a large dependence on the environment. In the Late Chalcolithic amongst the mammals we have some steppe species such as the onager and the gazelle; more adaptable species such as the hare, the fox and wild boar; while others are perhaps linked to a more humid environment, such as the roe deer, which is not

found in later periods. A fragment of a large bovine may be compared to the aurochs in terms of its dimensions which are quite distinct from the size of domestic bovines.

The high number of *Unionidae* valves among the molluscs, linked with the presence of permanent courses of water, would lead one to think of humid zones. Sea-shells are rare and all come from the Mediterranean.

In the Bronze Age the weasel and the Mesopotamian fallow deer have been identified, as well as hare, fox and wild boar. The lion appears amongst the steppe species. The number of *Unionidae* decreases, though in the Late Bronze Age fish remains have been found to indicate water courses. Since the fish are of large dimensions, all belonging apparently to the same species and having a certain value as food stuffs, they may have been traded items and therefore have come from another locality nearby. It should be noted that the fish remains are located mainly in sector E, even in successive periods.

In the Iron Age the steppe species such as hyena, lion and gazelle increase. To this group we may add amongst the birds, the ostrich which has been identified both by bone and egg-shell remains. Some forest species such as deer and badger indicate the presence of nearby forests. Amongst the foxes *Vulpes rüppelli* has been identified. Wild boar remains quite rare in all phases. Its bones can be distinguished from those of domestic pigs on the basis of cranial dimensions and characteristics. It should be noted that despite the problems that the domestic pigs must have had, the environment cannot have been completely hostile towards them given the presence of the wild form.

In the Iron Age some remains of birds have been identified by Dr. Cassoli of Museo Pigorini in Rome. Amongst these we can find some species which are linked to an aquatic environment. However, these may not be taken as being clearly indicative of the existence of humid zones as they may have been passing through the area or may be domestic forms. In particular, the case of a coracoid of *Anas platyrhynchos* has been hypothesised as an example of domestication as a result of the presence of an advanced state of arthritis which would have prevented it from moving properly.

The marine molluscs imported from the Mediterranean as decorative objects are plentiful, though some examples of *Cypraea annulus* coming from the Indian Ocean were found in the levels of Iron Age I and II.

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Table 1. Number of fragments per species in the different periods and archeological units

Tell Afis 1988-1997	I 3	I 3	I 3	I 3/2	I 3/2	I 3/2	I 3/1	I 2	I 2	I 2	I 2	I 2	I 2	I 1	I 1	I 1	I 1	LBA	LBAI	MBA	EBA4	LC	
																							sec.G
<i>Phyllonotus trunculus</i> (L.)														1								1	2
<i>Murex brandaris</i> (L.)				1					1					1									
<i>Trochidae</i>									1														
<i>Charonia</i> sp.				1																			
<i>Nassa</i> sp.	2																						
<i>Arcularia gibbosula</i> (L.)	4			4				1	3					1									
<i>Columbella rustica</i> (L.)																							
<i>Buccinum cornutum</i> (L.)				1																			
<i>Cypraea annulus</i> (L.)														1									
<i>Cypraea spurca</i> (L.)				1																			
<i>Cypraea</i> sp.	1																						
<i>Conus mediterraneus</i> (Brug.)	1																						1
<i>Mitra</i> sp.																							
<i>Mitra ebenus</i> (Lk.)				1																			
<i>Potamides</i> sp.				2																			
<i>Rumina decollata</i> (L.)																							
<i>Helicidae</i>	1																						
<i>Gastropoda</i>	2			5	2	1		1						8							1	3	4
<i>Dentalium</i> sp.	1																				1	2	5
<i>Dentalium sexangulum</i> Schro- eter																							
<i>Bivalvia</i>																							
<i>Glycymeris glycymeris</i> (L.)				1																			
<i>Glycymeris pilosa</i> (L.)				1																			
<i>Glycymeris violaceus</i> (Lam.)																							
<i>Glycymeris</i> sp.	4			1		2	1	2	2					6	1	2	2						3

Table 1. continuation

Tell Afis 1988-1997	I 3	I 3	I 3	I 3/2	I 3/2	I 3/2	I 3/1	I 2	I 2	I 2	I 2	I 2	I 1	I 1	I 1	I 1	LBA	LBA1	MBA	EBA4	LC
Number of fragments	sec.G	sec.H	sec.L	F1008	sec.G	sec.L	sec.D	L1344	sec.G	sec.E2	sec.F	sec.E1	sec.G	sec.E2	sec.E1	sec.E1	sec.E1	sec.E1	sec.E1	sec.E1	sec.E1
<i>Lepus capensis</i> (L.)	4			4	1		1					1	2		12	2			1		2
<i>Canis familiaris</i> (L.)	51	1	3	86	17	1	19	24	4	8	7	7	48		25	2	1		7	1	17
<i>Vulpes vulpes</i> (L.)	2			1						1	2		4		4						2
<i>Vulpes rüppelli</i> (Schinz)	1														1						
<i>Vulpes</i> sp.					1										4				1		1
<i>Hyaena hyaena</i> (L.)	1																				
<i>Meles meles</i> (L.)									1												
<i>Mustela nivalis</i> (L.)	1			1					1						1					3	
<i>Panthera leo</i> (L.)										1											
<i>Sus scrofa ferus</i> (L.)	2			3			1						5		2		1			1	4
<i>Sus scrofa domestica</i> (L.)	345	3	17	171	18	33	88	37	70	142	85	3	427	100	659	21	4	9	9	16	66
<i>Cervus elaphus</i> (L.)				5			2	1	1	4											
<i>Dama mesopotamica</i> (Brooke)							2								1						
<i>Cervus/Dama</i>	1												1						5		4
<i>Capreolus capreolus</i> (L.)																					2
<i>Bos</i> cf. <i>primigenius</i> (Bojanus)																					4
<i>Bos taurus</i> (L.)	255	6	74	347	28	48	172	60	101	175	55	6	345	75	547	46	6	66	79	76	
<i>Bos indicus</i>				2																	
<i>Gazella</i> sp.	50		1	120	5	8	15	3	5	17	3		45	3	125	8		3	2	5	
<i>Gazella subgutturosa</i> (Güldt.)				1				2					1		1						
<i>Ovis aries</i> (L.)	110	4	5	224	9	17	79	15	55	59	30		172	21	320	33	10	40	43	28	
<i>Ovis</i> cf. <i>annon</i> (L.)				1									3		18	1			1		
<i>Capra hircus</i> (L.)	44		1	108	5	6	40	7	15	17	7		57	10	102	13	1	11	10	10	
<i>Capra</i> cf. <i>aegagrus</i> (Erxl.)				1											2						
<i>Ovis</i> vel <i>Capra</i>	1032	11	91	1671	152	120	361	138	235	263	175	22	920	197	1708	206	52	301	250	343	
<i>Ovis</i> vel <i>Capra</i> (wild)							2		3				3		8	1					

Table 1. continuation

Tell Afis 1988-1997	I 3	I 3	I 3	I 3/2	I 3/2	I 3/1	I 2	I 2	I 2	I 2	I 1	I 1	I 1	I 1	LBA	LBA1	MBA	EBA4	LC
Number of fragments	sec.G	sec.H	sec.L	F1008	sec.G	sec.L	sec.D	L1344	sec.G	sec.E1	sec.F	sec.G	sec.E2	sec.E1	sec.E1	sec.E1	sec.E1	sec.E1	sec.E1
<i>Equus asinus</i> (L.)	21		2	56	6	36	1	4	38	5	4	32	10	31				4	
<i>Equus hemionus</i> (Pall.)				2		1								1		1		3	1
<i>Equus asinus/hemionus</i>	2			6		9	9					7		1				5	2
<i>Equus caballus</i> (L.)	14			7	2	24	4	4	3	1		11	1	9	2	2		4	3
<i>Equus</i> sp.	47		8	21	3	25	10	23	29	2	1	75	6	52	2		4	14	22
<i>Camelus</i> sp.	2		4	19		6	5	2		1		11		3					

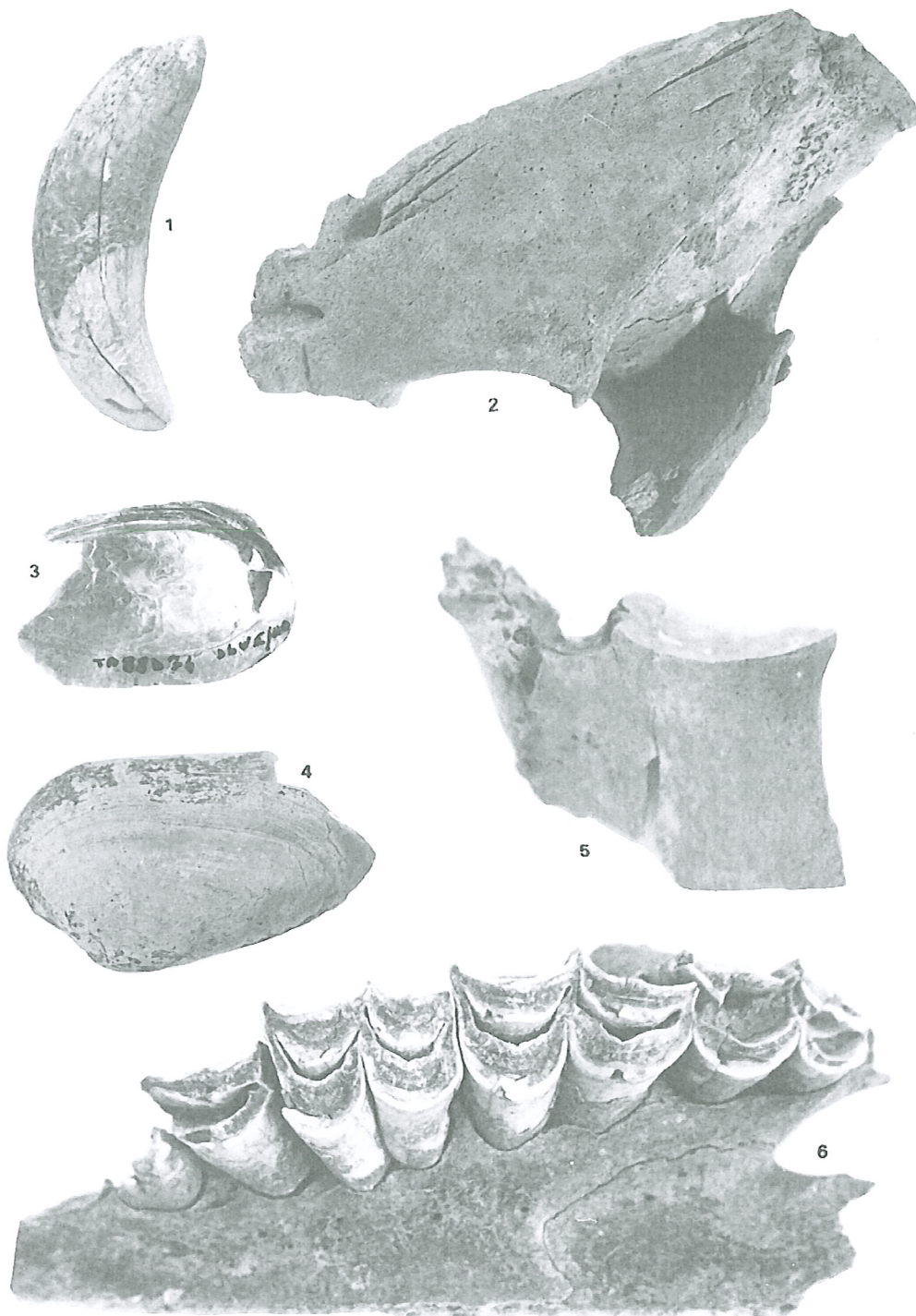


Fig. 1. 1= Inferior canine of *Camelus* spec., Iron Age III, life size (upside), 2= *Sus scrofa domesticus*, pathological skull with signs of butchering, Iron Age III, 3/4 life size, 3= *Unio* sp. Iron Age I/III, life size, 4= *Unio* sp. Iron Age I/III, life size, 5= *Equus* sp. Age Iron III, pathological scapula, life size, 6= *Camelus* sp., maxilla, Iron Age I/II, 4/5 life size.



Fig. 2. 1= *Canis familiaris*, mandible, Iron Age I, life size, 2= *Canis familiaris*, mandible, Iron Age I, life size, 3= *Canis familiaris*, humerus, femur and tibia of the same individual, Iron Age III, life size, 4= *Ovis vel Capra* pathological metatarsus, Iron Age I, life size, 5= *Gazella* sp. femur, Iron Age III life size.