

ARCHAEOZOOLOGICAL FINDS FROM KHIRBAT BURIN

MOSHE SADE

The archaeozoological finds from Kh. Burin are arranged according to the two main strata (I and II) exposed there, both dated to the Mamluk period (there was some intrusive material of the Early Islamic and Crusader periods, mainly in Stratum I). There were no finds from the limited area excavated below Stratum II. The bones were classified and measured following Schmid (1972) and von den Driesch (1976).

From Stratum II (the large building and its surroundings), material was collected from 18 different loci, in 63 baskets. Table 1 shows the distribution of the animal bones among the species found in Stratum II. Domestic animals include mainly cattle and sheep/goats, cattle being the most dominant species (56.5% of the assemblage). There are very few bones of wild animals, of which one belongs to a bear

Table 1. Distribution of Animal Bones from Stratum II

Species Bones	<i>Ovis aries/ Capra hircus</i>	<i>Bos tauros</i>	<i>Camelus dromedarius</i>	<i>Equus asinus</i>	<i>Equus caballus</i>	<i>Sus scrofa</i>	<i>Canis familiaris</i>	<i>Gallus gallus domestica</i>	Total
Horn core	1	2							3
Cranium	5	19							24
Orbit	1	1							2
Maxilla		3							3
Mandibula	13	22					1		36
Molar	19	36			1		2		58
Premolar	15	15					2		32
Incisor		2			2		1		5
Canine							1		1
Scapula	7	8							15
Humerus	6	11							17
Radius	6	3		1					10
Ulna	1	5						1	7
Metacarpus	4	4		1					9
Pelvis	11	11							22
Femur	3	3						2	8
Os carpal	1	1							2
Tibia/ Tibiotarsus	5	2	1					2	10
Calcaneus	2	4							6
Astragalus	1	3	1			1			6
Metapod	14	18	1	3					36

Table 1. Distribution of Animal Bones from Stratum II (cont.)

Species Bones	<i>Ovis aries/ Capra hircus</i>	<i>Bos tauros</i>	<i>Camelus dromedarius</i>	<i>Equus asinus</i>	<i>Equus caballus</i>	<i>Sus scrofa</i>	<i>Canis familiaris</i>	<i>Gallus gallus domestica</i>	Total
	Os centrotarsus		4	1					
Metatarsus	3	5	3					1	12
Phalanx I	5	7	2	1	1				16
Phalanx II		6	2	1					9
Phalanx III		4		1					5
Verterbra	1	1		1					3
Verterbra axis	1	4							5
Verterbra cervical	1	2							3
Verterbra thoracic	1	3							4
Verterbra lumbar	14	31	2	1					48
Costa	38	51	3	1					93
Total	179	291	16	11	4	1	7	6	515
%	34.76	56.50	3.10	2.13	0.77	0.22	1.36	1.16	100.00

Note: not included in the table are 1 canine of *Ursus* and 1 metapod of an *Aves sp.*

Table 2. Right and Left Limbs from Stratum II

Species Bones		<i>Ovis aries/ Capra hircus</i>		<i>Bos tauros</i>		<i>Camelus dromedarius</i>		<i>Equus asinus</i>		<i>Sus scrofa</i>		<i>Gallus gallus domestica</i>	
		R	L	R	L	R	L	R	L	R	L	R	L
Humerus	P			2									
	D	1	4	6	3								
Radius	P	1		1	1								1
	D	2	1		1				1				
Ulna	P			1	3								
	D				1								
Metacarpus	P	2	2	2	2				1				
	D	1	1						1				
Femur	P			1								1	
	D	1	1	1									1
Tibia/Tibiotarsus	P		1										1
	D	3		1	1	1						1	1
Metatarsus	P			3	1	1						1	
Tarsometatarsus	P		2									1	
	D		2										1
Astragalus		1		2	1	1					1		
Calcaneus		1	1	3	1								

P = Proximal; D = Distal

and another to an unidentified bird. Table 2 shows right and left limbs from Stratum II, and Table 3 shows the Minimal Number of Individuals (MNI). After cattle (6), sheep/goat (4) are the most numerous, and the rest of the species are represented by solitary specimens.

In Stratum I, 31 baskets of bones were retrieved from six loci. Table 4 shows the species and the distribution of the bones. Sheep/goats are now the most dominant species, but cattle is still well represented. A turtle fragment (*testudo graeca*) and a snail shell (*punctum lederi*)

Table 3. MNI of Domestic Animals from Stratum II

Species	<i>Ovis/ Capra</i>	<i>Bos tauros</i>	<i>Camelus dromedarius</i>	<i>Equus asinus</i>	<i>Equus caballus</i>	<i>Sus scrofa</i>	<i>Canis familiaris</i>	<i>Gallus gallus domestica</i>	Total
N	4	6	1	1	1	1	1	1	16
%	25.00	37.50	6.25	6.25	6.25	6.25	6.25	6.25	100.00

Table 4. Distribution of Animal Bones from Stratum I

Species Bones	<i>Ovis aries/ Capra hircus</i>	<i>Bos tauros</i>	<i>Camelus dromedarius</i>	<i>Equus asinus</i>	<i>Sus scrofa</i>	<i>Canis familiaris</i>	<i>Gallus gallus domestica</i>	Total
Horn core	5	1						6
Cranium	6	1					1	8
Occipital		1						1
Premaxilla		2						2
Orbit	1	1						2
Hyoid	1							1
Mandibula	10	9	1		1			22
Molar	19	15	3	1				38
Premolar	9	5	1					15
Canine					1			1
Scapula	16	7				1		24
Humerus	2	3	1	2			1	9
Radius	6	6		1				13
Ulna	5	5	1	1				12
Metacarpus	6	3		1				10
Os carpal	1	1						2
Pelvis	13	10					3	26
Coracoid							1	1
Sternum							2	2
Femur	4	7		1			5	17
Tibia/ Tibiotarsus	3	4					3	10
Calcaneus	1	3		1			1	6
Astragalus	3	3		1				7
Tarsometatarsus							2	2
Metapod	24	14	1				3	42
Metatarsus	8	4						12
Os centrotarsus		1						1

Table 4. Distribution of Animal Bones from Stratum I (cont.)

Species Bones	<i>Ovis aries/ Capra hircus</i>		<i>Bos tauros</i>		<i>Camelus dromedarius</i>		<i>Equus asinus</i>		<i>Sus scrofa</i>		<i>Canis familiaris</i>		<i>Gallus gallus domestica</i>		Total
Phalanx I	3		14				1								18
Phalanx II			5		2										7
Phalanx III	1		3												4
Patella			1												1
Vertebra			1												1
Vertebra axis	1		2		1										4
Vertebra central					1										1
Vertebra thoracic	5		2		1										8
Vertebra lumbar	19		39		3										61
Sacrum			2												2
Costa	90		70		3										163
Total	262		245		19		10		3		1		22		562
%	46.62		43.59		3.38		1.78		0.53		0.19		3.91		100.00

Note: not included in the table are 2 fragments of turtle carapace (*Testudo graeca*) and 1 snail shell (*Punctum lederi*)

Table 5. Left and Right Limbs from Stratum II

Species Bones	<i>Ovis aries/ Capra hircus</i>		<i>Bos tauros</i>		<i>Camelus dromedarius</i>		<i>Equus asinus</i>		<i>Gallus gallus domestica</i>	
	R	L	R	L	R	L	R	L	R	L
Humerus	P								1	1
	D	1	1	2	1				1	1
Coracoid										1
Radius	P	2		1	2					
	D	2	1	1					1	
Ulna	P	1	2	1	1	1			1	
	D		1							1
Metacarpus	P	3	4	1					1	
	D	2	1						1	
Femur	P	2		1	2					4
	D	1		3	1				1	3
Tibia	P		2	2	1					
	D	1			1	1				
Tibiotarsus	P					1			1	
Tarsometatarsus	P									1
	D									1
Metatarsus	P	2	7		2					
	D		4							
Calcaneus			1	1	2	1		1		
Astragalus		1	2	1	1				1	

P = Proximal; D = Distal

Table 6. MNI of Animals from Stratum I

Species	<i>Ovis/capra</i>	<i>Bos tauros</i>	<i>Camelus dromedarius</i>	<i>Equus asinus</i>	<i>Sus scrofa</i>	<i>Canis familiaris</i>	<i>Gallus gallus domestica</i>	Total
N	7	4	1	1	1	1	4	19
%	36.8	21.0	5.3	5.3	5.3	5.3	21.0	100.00

were also found. Table 5 shows right and left limbs, and Table 6, the Minimal Number of Individuals in Stratum I. Sheep/goats are more dominant than cattle now, and the hen appears in larger numbers.

It cannot be established whether the differences between Strata I and II reflect a change in the economy of the site, or are due

merely to random factors of the excavation (Stratum I, being closer to the surface, perhaps includes mixed material).

The archaeozoological remains from Kh. Burin are very similar to those from the contemporary site of Nevé Yaraq (Lod), where sheep/goats, cattle, ass, horse, camel, dog and other species have been found (Sade, in prep.).

REFERENCE

- von den Driesch A. 1976. *A Guide to the Measurement of Animal Bones from Archaeological Sites* (Peabody Museum Bulletin 1). Cambridge, Mass.
- Sade M. In preparation. The Archaeozoological Remains. In E. Yannai. *Excavations at Lod—Deopolis*.
- Schmid E. 1972. *Atlas of Animal Bones—For Prehistorians, Archaeologists and Quaternary Geologists*. Amsterdam.