

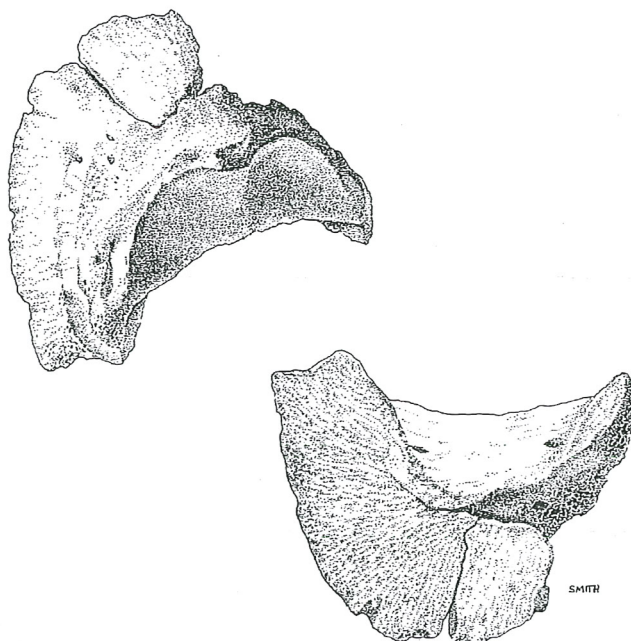


ARCHAEOZOOLOGY OF THE NEAR EAST III

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

edited by

H. Buitenhuis, L. Bartosiewicz and A.M. Choyke



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Cover illustration: Dorsal and palmar aspects of a
Bronze Age horse phalanx from Arslantepe, Turkey,
identified by Sándor Bökönyi.
Courtesy by the artist, Patricia Smith (Reduction: 64%).

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Preface

This publication is the result of the third international symposium on archaeozoology of southwestern Asia and adjacent areas, held in Budapest, Hungary from 2 - 5 September 1996. The editors would like to thank all colleagues of the Working Group who helped with the translation of abstracts. Financial support for the publication was given by the Acker Stratingh Stichting, Groningen, The Netherlands.



Participants of the 3rd ASWA Conference, Budapest 1996
(Photo: Péter Komjáthy, Aquincum Museum)

Standing, left to right: B. De Cupere (Belgium), G. Bar Oz (Israel), H. Buitenhuis (The Netherlands), R. Rabinovich (Israel), L. Leblanc (New Zealand), N. Benecke (Germany), H. Hongo (Japan), N. Russell (USA), J. Speth (USA), A. Patel (India), E. Stephan (Germany), C. Cavallo (The Netherlands), W. Van Neer (Belgium), A.T. Clason (The Netherlands), T. Dayan (Israel), L. Van Es (The Netherlands), C. Becker (Germany), R. Meadow (USA), M. Mashkour (France), F. Poplin (France), E. Vila (France), Mrs. Poplin (France), L. Bartosiewicz (Hungary), E. Pellé (France), P. Ducos (France).

In front, left to right: E. Tchernov (Israel), L. Martin (Great Britain), A. Choyke (Hungary), I. Zohar (Israel).

Participants not shown in picture: D. Carruthers (Great Britain), D. MacHugh (Ireland), S. Whitcher (Great Britain).

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A WEASEL FEMUR (*MUSTELA NIVALIS* LINNÉ 1766) FROM THE IRON AGE OF TELL DEIR 'ALLA (JORDAN)

Lambert J.M. van Es¹

Résumé

Le fémur d'un petit mustelid du début de l'âge de fer à Tell Deir 'Alla en Jordanie est identifié comme venant d'une belette, *Mustela nivalis* Linné 1766. Ce fémur est la preuve la plus ancienne de la présence de cet animal dans le Levant sud.

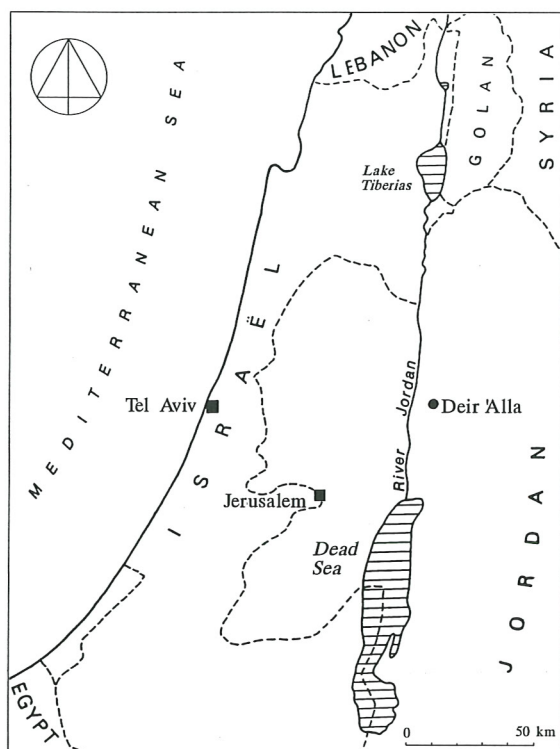


Figure 1. Map of the location of Deir 'Alla.

Introduction

Tell Deir Alla is situated on the east side of the Jordan River near the place where the Wadi Zarqa (Jabbok) enters the valley (Fig.1).

The occupation of Tell Deir 'Alla began in the Middle Bronze Age. The first settlement was built on a natural rise in the landscape. During the Late Bronze Age a sanctuary was built on the Tell. This sanctuary was later completely destroyed and burnt. The occupation of Tell Deir 'Alla continued till Iron Age III, around 330 BC.

Excavational activities at Tell Deir 'Alla have a long history. The first one to show interest was Merrill, who identified Tell Deir 'Alla as biblical Succoth in 1878. (Kooij and Ibrahim, 1989). Under the leadership of Franken, University of Leiden, initial excavations started in 1959. Since that time more than 14 seasons of excavation have followed. Together with numerous artefacts and architectural remains, thousands of animal bones have been recovered. Among these a small number of Mustelid bones have been identified.

Material

One femur of a weasel, *Mustela nivalis*, (Fig. 2) and a partial skeleton of a marbled polecat, *Vormela peregusna* Gldenstdt 1770, have been found. The femur with completely fused epiphyses was recovered in the early 60's and dates from the Iron Age (12th century BC)². This femur is, along with weasel bones from Tell Hesban, the earliest evidence of weasel in Jordan (Boessneck and Von den Driesch, 1995). The bone compares very well with femora from stoat, *Mustela erminea*, from the comparative collection of the Groninger Institute for Archaeology. Compared with femora from European weasels, the large size of the femur made it at first almost unthinkable that it could come from a weasel.

¹ Groninger Institute for Archaeology, Poststraat 6, 9712 ER, Groningen, The Netherlands.

² The dating is based on archaeological evidence. Whether this femur is culturally related or stems from natural deaths of animals who entered the holes of some of their prey is uncertain (Boessneck, 1973; Boessneck and Von den Driesch, 1995).

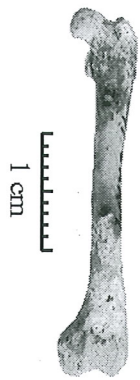


Figure 2. Femur of a weasel, *Mustela nivalis*, (A/622/4) from Iron Age layers of Tell Deir 'Alla.

Weasels and stoats exist sympatrically in most parts of Europe. The occurrence of the stoat is however more restricted to the northern regions. They do not occur in most of the Mediterranean area and are not found in Europe south of the 42° latitude (Van den Brink, 1972; Görner and Hackethal, 1988). The weasel has a somewhat larger distribution and is found in most parts of Europe and as far south as Egypt and Morocco (Van den Brink, 1972; Harrison, 1968).

The geographic variation in size of weasels is considerable, the smallest forms are found in the north, reaching a maximum size in Egypt (Corbet, 1978; Görner and Hackethal, 1988). The weasel is thus one of the few species which contradicts Bergman's rule which says that animal size is dependent on geographic latitude, animals in the north being larger than animals of the same species in the south. The femur from Tell Deir 'Alla is over 40% larger (GL measurement) than femora from recent North European weasels (Table 1). When we look at femora from European stoats, we see that the femora are more comparable in size with those from weasels from the Levant. It looks as if these weasels have filled a niche that, because of the absence of stoats in the Levant, was empty. The absence of a small carnivore in the Levant, the size of a European weasel, is a problem. It is possible that weasels in the Levant simultaneously occupy both niches that apparently exist in Europe.

Middle Eastern weasels (ancient)					European weasels (recent)						M.Polecat (ancient)		
	A	B	C	D	E	F	G	H	I	J	K	L	M
GL	28.3	»30.5	29.5	31.5	20.9	23.4	22.7	21.5	22.5	16.9	37.0	34.0	-
GLC	-	-	-	32.1	21.3	24.0	22.8	22.2	22.8	17.3	-	-	-
BP	-	-	-	6.6	4.7	4.7	4.7	5.1	4.2	3.1	-	-	7.2
SD	2.5	2.7	2.5	2.6	1.7	2.2	1.8	1.8	1.7	1.2	3.5	3.2	
BD	5.8	6.0	6.0	6.1	4.1	4.8	4.6	4.3	4.3	3.0	8.0	7.3	7.2
sex	-	M	M	-	M	M	M	M	M	F	-	-	-

Table 1. Measurements in mm of weasel and marbled polecat femora from Tell Hesban and Tell Deir 'Alla and recent individuals (Measurements according to Von den Driesch, 1976);(F= female; M= male).

A= (A.4:28) undated (Tell Hesban)

B= (B.7:14) Byzantine (Tell Hesban)

C= (D.295) Early Roman (Tell Hesban part of a skeleton)

D= (A/622/4) Iron-Age (Tell Deir 'Alla) ;

E= recent (Heelsum) Holland

F= recent (BAI 763) Holland

G= recent (BAI 3699) Holland

H= recent (Groningen) Holland

I= recent (BAI 1159) Holland

J= recent (BAI 762) Holland

K= (B.7:14) Marbled Polecat (Tell Hesban)

L= (D.1:60) Marbled Polecat (Tell Hesban)

M= (E609) Marbled Polecat, Iron Age (Tell Deir 'Alla)

Hesban: Boessneck and Von den Driesch, 1995

Holland: comparative collection, Groningen

Conclusions

The remains of small mustelids such as weasels and marbled polecats are sporadically found during archaeological excavations, as in Tell Hesban and Tell Deir'Alla. Whether these remains are to be considered archaeological material is doubtful. It is unlikely that small mustelids were used as a food source. More likely would be the use of their skins. Skinning marks are most likely to occur on the skull, especially around the snout. Neither the skull of the marbled polecat from Tell Deir 'Alla or the weasel skulls from Tell Hesban have cutmarks. This makes it unlikely that these animals were skinned. Because of this, the mustelid remains of Tell Hesban and probably also from Tell Deir 'Alla might be considered intrusions.

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