

# ARCHAEOZOOLOGY OF THE NEAR EAST VI

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archaeozoology of southwestern Asia and adjacent areas

edited by

**H. Buitenhuis, A.M. Choyke, L. Martin, L. Bartosiewicz  
and M. Mashkour**

## ASWA VI



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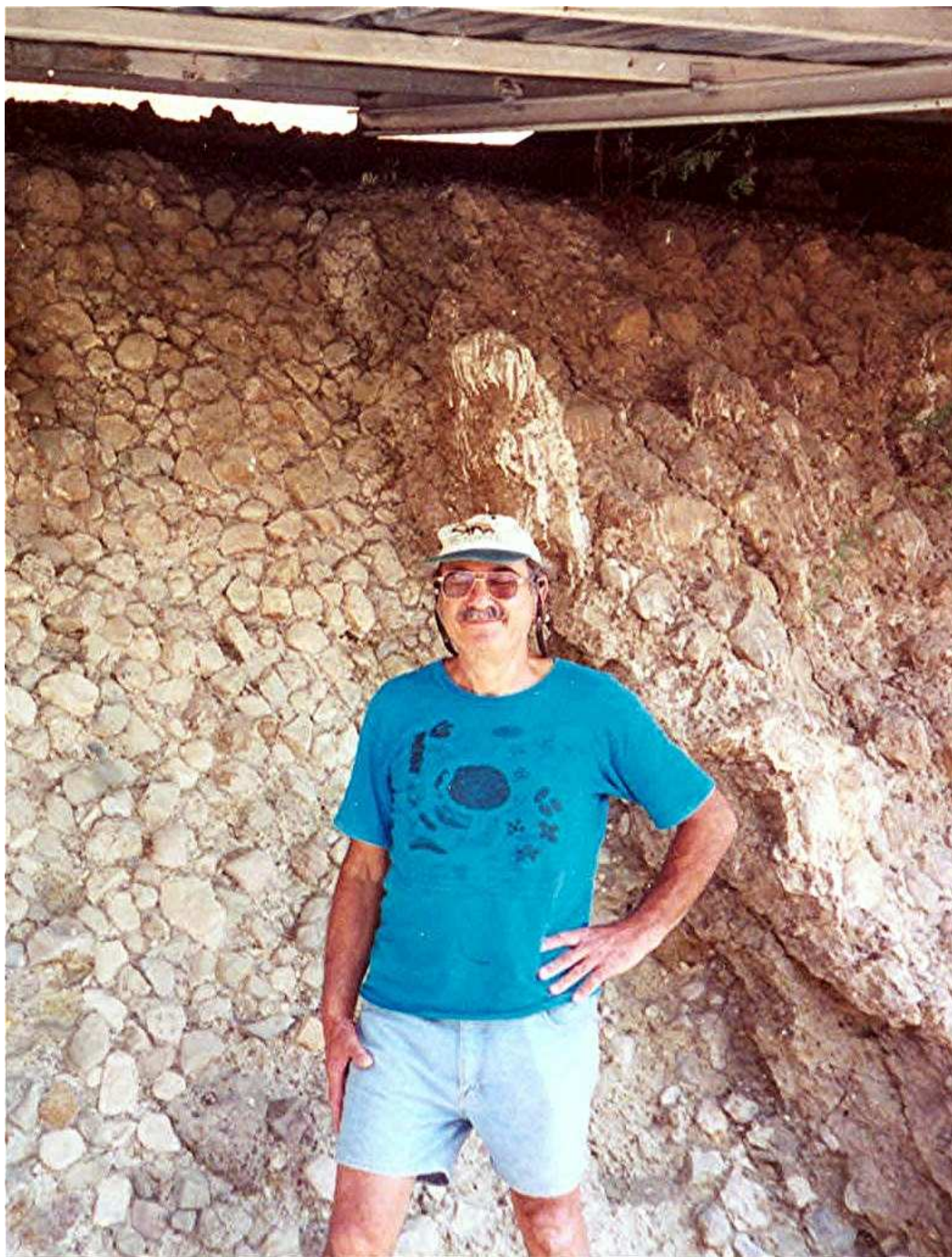
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Prof.Dr. Eitan Tchernov

This volume is dedicated to the memory of Prof. Dr. Eitan Tchernov, in fond memory of his enthusiasm and support to many in the field of archaeozoology.

## Preface

The ASWA VI meeting was held at the Institute of Archaeology, University College London, from 30<sup>th</sup> August-1<sup>st</sup> September 2002, timetabled to follow on the heels of the ICAZ meeting in Durham, UK. Over 55 participants attended the meeting, travelling from 13 countries, bringing the latest research results from our field. As usual, it was a pleasure to see so many doctoral students presenting their research – a sign for a very healthy future for zooarchaeology in south west Asia. It is still unfortunate, however, that colleagues from some Middle Eastern countries were unable to attend due to financial and political constraints.

Presentations were organized into the following six themes, which highlight the scope of the ASWA membership: Animals in Palaeolithic and Epipalaeolithic Levant; Neolithic Patterns of Animal Use; Animals in Neolithic Anatolia; Animals in the Chalcolithic and Bronze Ages; Iron Age, Nabatean and Roman Patterns of Animal Use; Animals in Ancient Egypt. There was also a poster session, and contributors were invited to submit papers to this volume.

As always with the ASWA forum, the meeting served to welcome new scholars to the group, but was also very much a reunion of old friends and colleagues who have been sharing new information and discussing issues of joint interest for many years now. In this vein, it is a great sadness that ASWA VI was the last international meeting attended by Prof. Eitan Tchernov, an original founder of the group and mentor and inspiration to so many. For many of us, it was the last time we saw Eitan, and experienced his usual incisive comment, unstoppable enthusiasm for the subject, and warm friendship. He will be greatly missed.

ASWA VI was supported by the Institute of Archaeology, UCL, who provided facilities and financial and administrative help. In particular, the organizing team was aided greatly by the administrative assistance of Jo Dullaghan at the Institute. ARC bv (Archaeological Research and Consultancy, Groningen, The Netherlands) once again shouldered the finances of the publication of the proceedings, and we are extremely grateful for their continuing support. Many thanks are also due to the post-graduate student helpers from the Institute of Archaeology who made the meeting run so smoothly: Banu Aydinoğlu, Jenny Bredenberg, Chiori Kitagawa, Peter Popkin, and Chris Mosseri-Marlio (who also produced the logo reproduced on the frontispiece of this volume).

Many thanks to all the participants for making the meeting such a success!

Louise Martin  
London 2005



Participants of the 6th ASWA Conference, held at the Institute of Archaeology, University College London.

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# FOX-TRAPS IN SOUTHEAST ARABIA

Carl Phillips<sup>1</sup>

## Abstract

This paper discusses the distribution and interpretation of particular stone-built structures in South East Arabia that have previously been interpreted as tombs. Excavations at Wadi Hubayb in the U.A.E. raised questions about the function of these structures, and on the basis of their form, archaeological comparisons and ethnographic observation, it is argued here that they most likely represent fox-traps. Reasons for constructing fox traps are considered, including the need to control predators in pastoral areas, and their potential for dietary contribution. The possible dating of the structures is also discussed.

## Resumé

Cet article discute de la répartition et de l'interprétation de certaines structures construites en pierre dans le sud-est de l'Arabie, interprétées récemment comme tombe. La fouille à Wadi Hubayb aux Emirats Arabes Unis a soulevé la question sur la fonction de ces structures et d'après leur forme, les comparaisons archéologiques et les observations ethnographiques il est proposé ici qu'elles soient vraisemblablement des pièges à renard. Les raisons de la construction des pièges à renard est examinée, y compris le besoin de contrôler les prédateurs dans une aire d'activité pastorale ainsi que leur potentiel dans l'apport alimentaire. La datation probable des structures est également débattue.

Keywords: Fox traps, Southeast Arabia, predator control, ethnography.

Mots Clés: Les pièges à renard, Sud est d'Arabie, contrôle des prédateurs, ethnographie

## Introduction

During the late 1980s a programme of survey and excavations was conducted in the Wadi al-Qawr. This wadi forms a part of the southern territory of Ras al-Khaimah in the United Arab Emirates<sup>2</sup>. In the predominantly mountainous landscape through which the wadi passes, a number of settlements and a variety of tombs dating from c. 3000 BC to c. 500 BC were recorded (Phillips, 1998). Many of the tombs are comparable with types found elsewhere in southeast Arabia (i.e. the United Arab Emirates and the Sultanate of Oman). An archaeological feature recorded in the Wadi Hubayb, which is a tributary of the Wadi al-Qawr, was initially interpreted as a tomb. It took the form of a narrow, rectangular stone cairn, which although smaller, appeared not too dissimilar to some of the Middle Bronze Age (c. 2000 - 1600 BC) 'Shimal-type' tombs which have been recorded at several locations in the United Arab Emirates. (Vogt and Franke Vogt, 1987). Despite the presence of second millennium tombs in the Wadi al-Qawr, no 'Shimal type' tomb had been recorded there and this prompted the excavation in the Wadi Hubayb. It was quickly realized however that the feature initially identified as a tomb was actually a fox-trap.

Whilst this revelation was initially disappointing it became apparent later that such traps are a common feature of the landscape of southeast Arabia (Fig. 1) and this is probably not the only time that a similar structure has been mistaken for a tomb. For example, Corboud *et al* report a tomb in the Wadi al-Fay in northern Fujairah which, with the benefit of hindsight, now looks suspiciously like a similar type of trap (1988: 37, fig. 10). More recently Ziolkowski has proposed that a feature in the Wadi Saqamqam near the town of Fujairah was "a tomb subsequently altered to form a fox-trap" (2003: 10, plates 11 and 12). As a result of the excavation in the Wadi Hubayb I would suggest that neither of these two examples are tombs and that both were intended from the outset as traps.

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<sup>2</sup> The Wadi al-Qawr project was initiated under the aegis of the Society for Arabian Studies with the consent and support of the National Museum in Ras al-Khaimah. I would like to acknowledge the support given by the National Museum and in particular its director H.H. Sheikh Sultan bin Saqr al-Qasimi and his assistant Jay Laxman. I would also like to thank Beatrice de Cardi for her help and support in the establishment of the project. Funding in the year of the excavation in Wadi Hubayb was provided by the Society for Arabian Studies and The British Council.

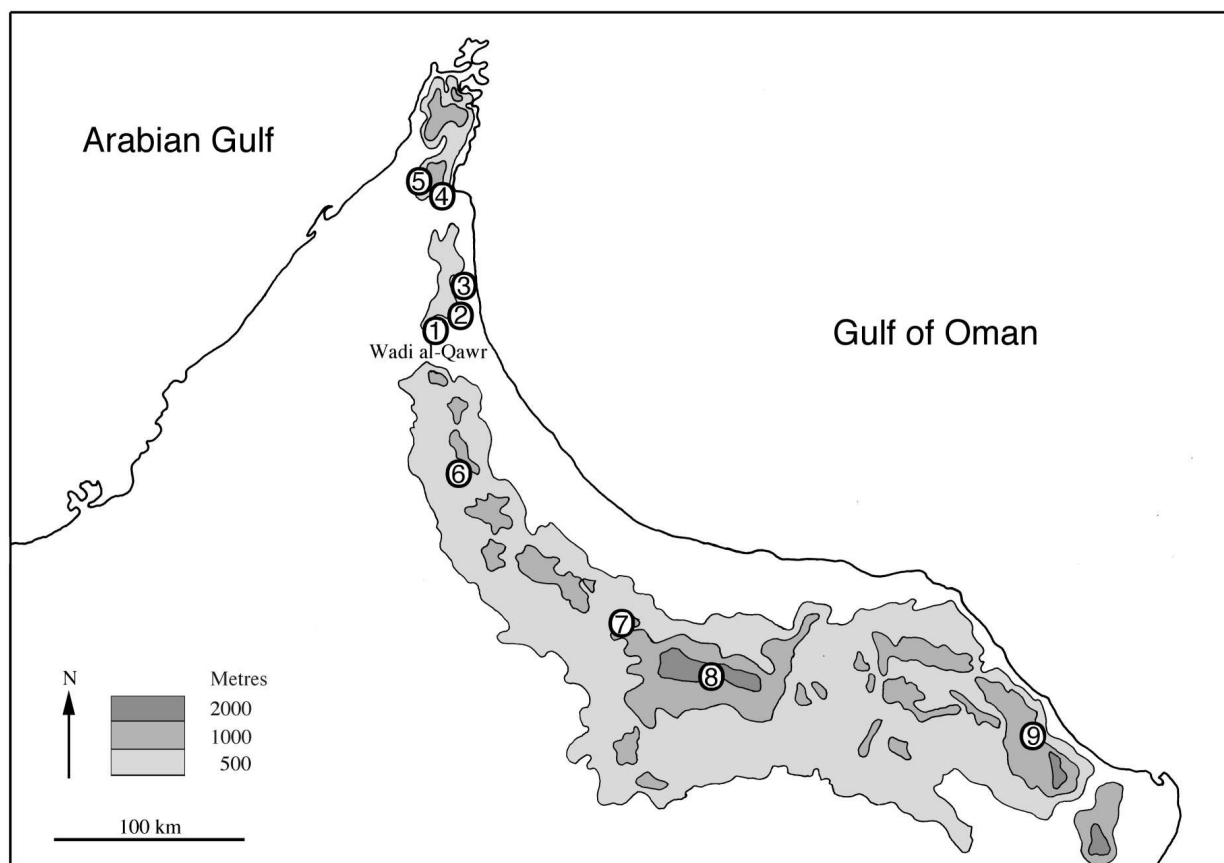


Fig. 1. Map showing the general distribution of fox-traps in southeast Arabia. The locations and sources are as follows:

1. Wadi Hubayb (Phillips in this paper)
2. Wadi Hilu (Phillips, *ibid.*)
3. Wadi Saqamqam (Ziolkowski, 2003)
4. Wadi Khabb Shamsi (Phillips *ibid*) and Wadi al-Fay (Corboud *et al.*, 1988)
5. Wadi Bih (Phillips *ibid*)
6. Masah (Emirates Natural History Group)
7. Wadi Hawasina (Phillips *ibid*)
8. Jabal al-Akhdar (Ward, 1987)
9. Shir (Yule and Weisgerber, 1998)

### The Wadi Hubayb fox-trap

The fox-trap is located on the west bank of the Wadi Hubayb and adjacent to the lower slopes of the surrounding hills (Fig. 2). Before excavation the structure took the form of a rectangular cairn, approximately 8 metres long and 2.50 metres wide. Built of large angular stones it stood approximately 0.70 metres at the highest point. The area surrounding the structure was littered with smaller stones which were removed prior to excavation. Any larger stones that appeared not to be in-situ were also removed. When this was done, a number of roofing slabs became apparent.

The roofing slabs were laid across the internal 'corridor' of the structure and although some were now missing, they presumably covered the entire length of the trap (Fig. 3a). The 'corridor' covered by the roofing slabs was very narrow and tapered from the entrance to the narrower end which was presumably blocked when the trap was functioning. It was the narrowness and shallowness (Fig 3 section X-Y) of the 'corridor' that first raised doubts about this being a tomb. Also, no finds or bone fragments were recovered during the excavation despite fine sieving of all the deposits.

The outer and inner walls of the trap were clearly defined, made from large stones and a fill of smaller stones (Fig. 3b) After the narrow chamber/corridor had been excavated it became apparent that there was also a paved surface at ground level (Figs. 3b and 4). Part of the inner walls of the trap were therefore removed to expose the floor slabs in their entirety (Fig. 3c).

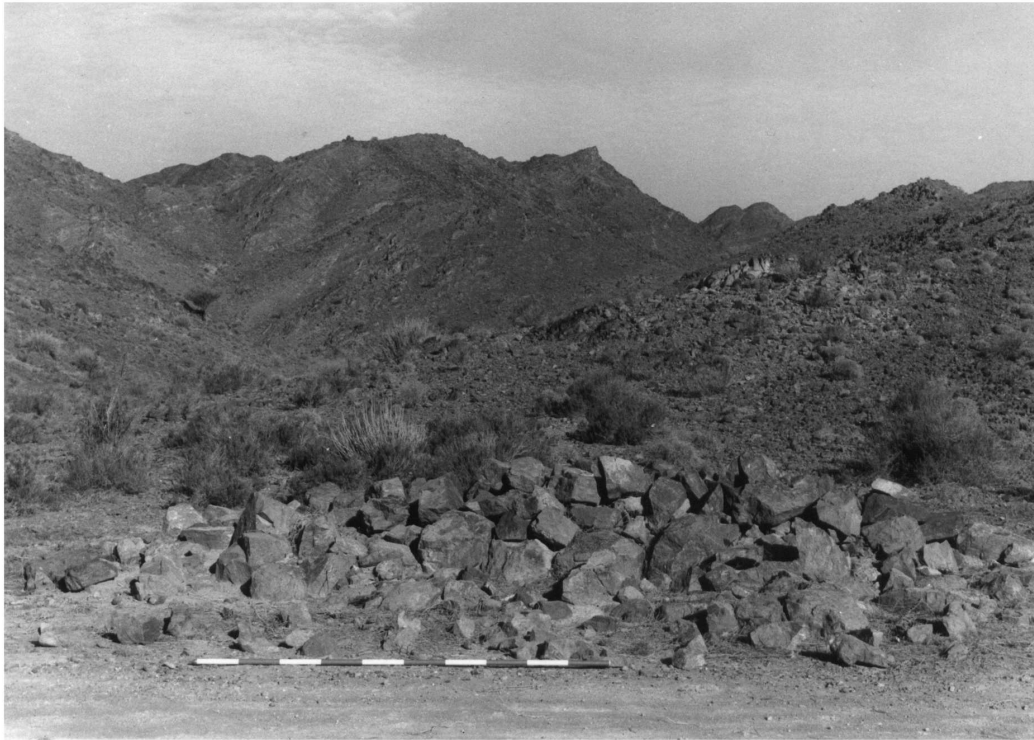


Fig. 2. The fox-trap in wadi Hubayb,

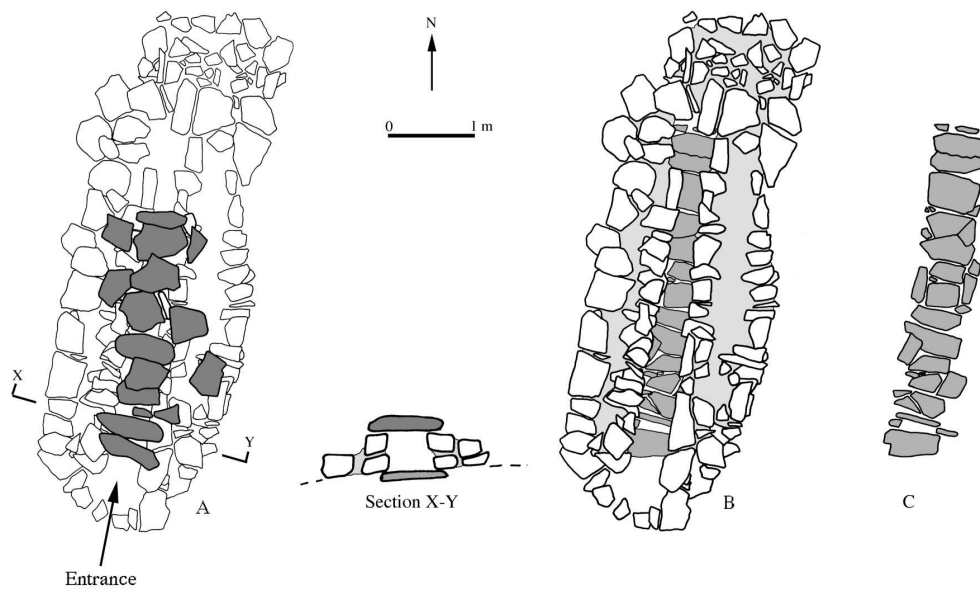


Fig. 3. Plans and section of the Wadi Hubayb fox-trap.



Fig.. 4. The Wadi Hubayb fox-trap after excavation, showing the narrow central 'corridor' and paved floor (scale = 1 metre).

## The use and distribution of fox-traps in southeast Arabia and beyond

Following the excavation in the Wadi Hubayb several similar traps were noted during journeys made in the mountain regions of the U.A.E and Oman. Very often the traps are much shorter in length than the excavated example and not so well constructed. The main characteristics are nevertheless the same. At one location in the Wadi Khabb Shamsi in the Musandam peninsula, a still functioning fox-trap was recorded (Fig. 5 a-c). It was seen how a flat stone slab is placed above the entrance and is held in place by a string which is anchored to a stick placed near the back of the trap, such that it protrudes in to the inside chamber. When the animal enters the chamber to take the bait, the stick is dislodged and the stone slab falls like a shutter and blocks the entrance.

Local informants in the United Arab Emirates invariably state that this kind of trap is for the capture of foxes. Ordinarily the traps are placed on the fringes of the settlement and personal observation seems to suggest that the lower slopes of hills adjacent to fields are a favoured location. As stated above, they appear to be widely distributed throughout south east Arabia. A number of examples are known from the area of the Wadi al-Qawr (Fig. 1 location 1). More examples have been recorded in the mountains near Fujairah (Fig. 1 locations 2 and 3), and the Musandam peninsula (Fig. 1 locations 4 and 5). Similar traps have been reported from further south in central Oman (Fig. 1 locations 6, 7 and 8), and in eastern Oman (Fig. 1 location 9). In Oman the traps are often described as wolf-traps (Ward, 1987: 224. Yule and Weisgerber, 1998: 189) Beyond this coherent distribution in south east Arabia, it can be noted that similar traps are known from north Yemen where they are sometimes intended to capture leopards (Jongbloed 1998: 41), and in the central Sahara where they are used to trap Jackals (Gast, 2000: 125).

## Predator control

The excavation of the Wadi Hubayb fox trap shows that a considerable effort was spent in its construction and this begs the question why. One answer might be concern with the vulnerability of flocks and the necessary control of predators. In addition to foxes potential predators in south east Arabia include wolves, hyenas and leopards<sup>3</sup>.

Sheep and goat herding has been important economic activity in many parts of southeast Arabia, especially in the mountains where villages are marginal to the main cultivated settlements. In such areas it has been noted how predators can have a significant impact. A study of mountain goatherds conducted in Oman in 1974-75 concluded that:

*“Causes of death, in decreasing order of importance, are; hyena and fox (also deaths attributed to nimr the small mountain leopard), by falling, and by eating gaffas, a poisonous plant. Whilst it is difficult to determine a general death rate, losses, apart from immediate post-natal deaths of kids, were found to be in the order of 12% per annum. Losses of kids and spontaneous abortions may be as high as 60% per year, so overall death rates in some mountain herds are considerable”.* (Birks, 1976:10).

This is a factor which might be of importance in discussing the composition of archaeological bone assemblages and particularly when the number of young animals appears to be lacking (e.g, Uerpman, Uerpman and Jasim, 2000).

## Predators or Protein ?

A second point to consider is whether some wild animals/predators might also have contributed to the diet, especially at times of acute food shortage. From a contemporary perspective however, this is a

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<sup>3</sup> Potential predators in southeast Arabia recorded in Harrison and Bates (1991) include: Red fox, *Vulpes vulpes* (Linnaeus, 1758) pp.116-118; Ruppell's Sand fox, *Vulpes rueppelli* (Schinz, 1825) pp 118-120: Leopard, *Panthera pardus* (Linnaeus, 1758) pp 167-170: Caracal Lynx, *Caracal caracal* (Schreber, 1776) pp 164-165: Striped Hyaena, *Hyaena hyaena* (Linnaeus, 1758) pp 152-155: Wolf *Canis lupus* (Linnaeus, 1758) pp 114-116.

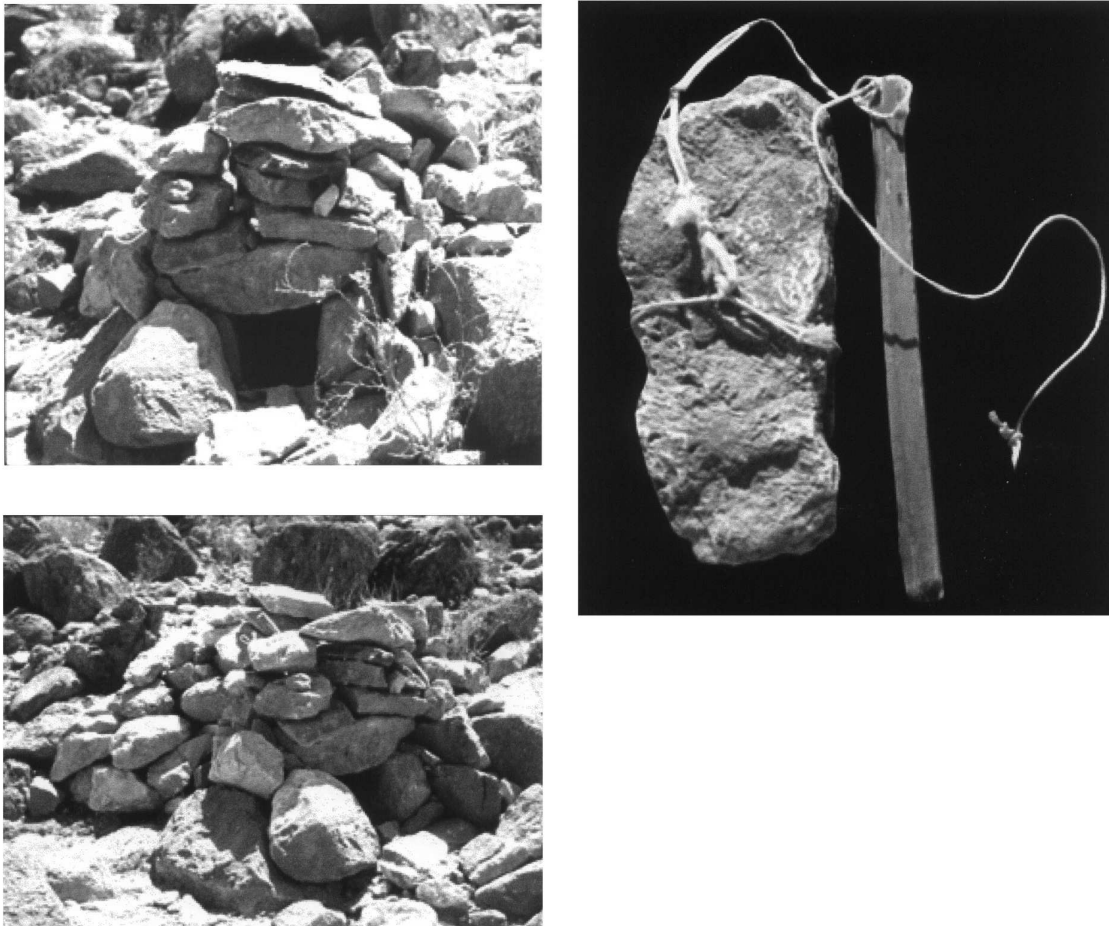


Fig. 5. Details of the fox-trap in Wadi Khabb Shamsi. Top left, view of the entrance to the fox trap. Left, General view of the trap. Above, detail of the stone slab door and stick.

sensitive issue and the available historical and anecdotal evidence is far from being consistent. The following selection of quotations nevertheless shows that wild animals now considered taboo have sometimes been categorized differently in the recent past<sup>4</sup>.

Examples from Arabian travel literature include:

*“What is or is not permissible to eat throughout the southern borderland of Arabia varies from place to place. Except for the townsfolk and this central group of tribes with non-Arabic languages, the hyena is eaten everywhere from Hadhramaut to Oman; the fox on the other hand is favoured only by the Bedawin of Oman and a chance nomad [...] ; the wolf is eaten by no one” . (Thomas, 1932:59-60)*

*“This started a discussion on what was lawful food. Arabs never distinguish between what is eatable and what is not, but always between food which is lawful and food which is forbidden. No Muslim may eat pork, blood, or the flesh of an animal which has not had its throat cut while it was still alive. Most of them will not eat meat slaughtered by anyone other than a Muslim, or by a boy who is still uncircumcised [...]. Otherwise the definition of what is lawful varies endlessly and in every place, and usually bears little relation to reason. I asked if a fox was legal food, and Hamad explained to me that sand foxes were, but mountain foxes were not. They agreed that eagles were lawful, but ravens were*

<sup>4</sup> It should be stated however that whilst animals such as foxes are present in the faunal records of some Arabian sites the numbers are invariably small and would not imply any economic importance. For the occurrence of fox on some sites in southeast Arabia see Potts 1997: 38, table 2. By way of contrast, recent finds at some early Islamic sites showing the presence of cut-marks on the bones of animals ordinarily considered taboo (e.g. MacLean and Insoll, 2003: 567) adds further weight to the anecdotal evidence cited above.

*forbidden, unless they were eaten as medicine to cure stomach-ache. Musallim said that the Duru ate the wild donkeys which lived in their country, and the others expressed incredulity and disgust. I said I would far rather eat a donkey than a wild cat, which al-Auf had just declared was lawful meat". (Thesiger, 1959:147)*

Other references from Arabia include:

*"Apart from the hubara, rabbits, lizards, gazelles and foxes were also sometimes hunted for food; wild cats, eagles, ravens and any other birds were invariably hunted when sighted, but if they were caught or shot they would only be eaten in extreme cases of near-starvation, because they were considered to be unclean". (Heard-Bey, 1982:171).*

*"Bedu of certain tribes have hunted and eaten wolves until recently. Foxes were also on the menu, especially I believe Rupell's sand foxes, and one or two tribes ate young donkeys as regular diet not that long before 1970". (Anonymous, Oman 2001).*

And one example from the central Sahara states:

*"Les moins sensibles s'occupent de la préparation, les autres mangent ce qu'on leur offre sans poser de question. Mais aucun adulte n'avoue avoir consommé délibérément de la viande de chacal". (Gast, 2000: 124).*

### Concluding remarks

The topic of animal traps occurs only sporadically in the archaeological literature. Towards the end of the nineteenth century the Scottish prehistorian Robert Munro suggested that his study of otter and

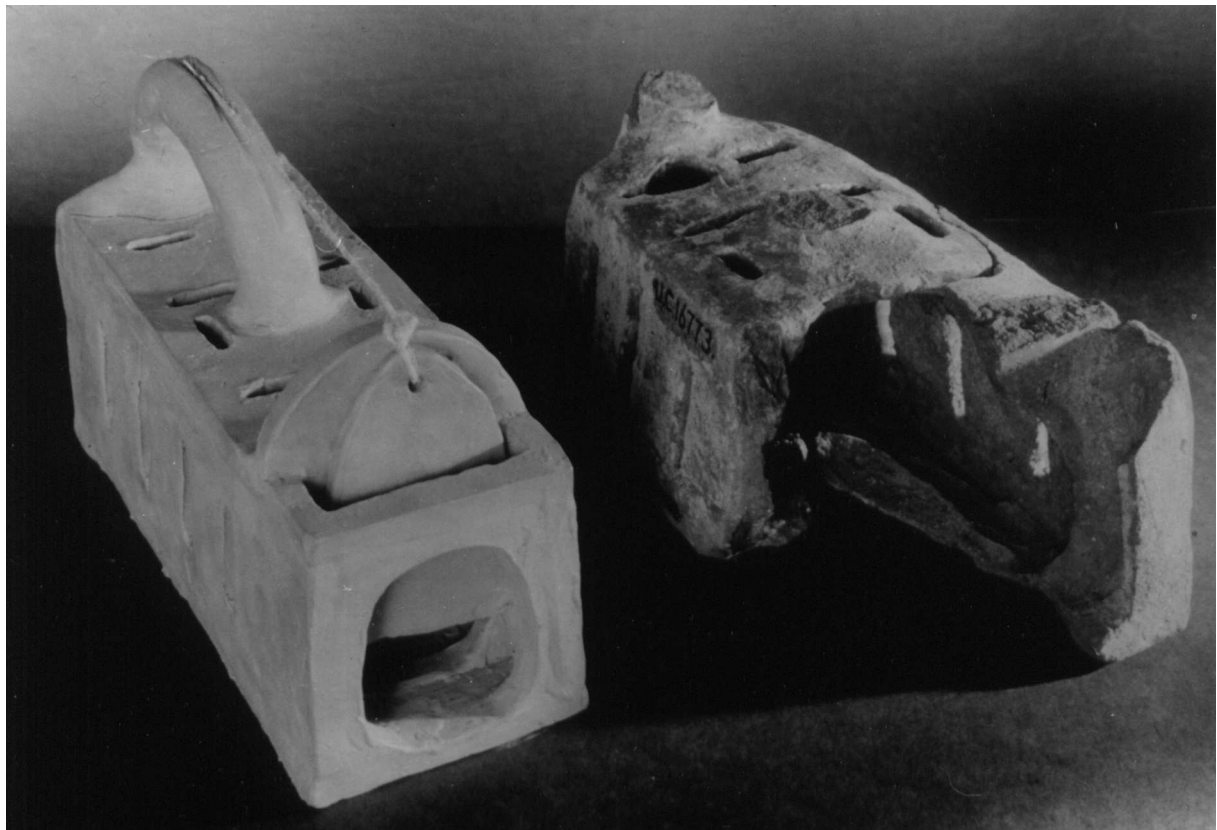


Fig. 6. Rodent trap from Kahun (c. 2000 BC) and modern reconstruction (courtesy of the Petrie Museum of Egyptian Archaeology).

beaver traps from various European countries supplied " the materials of an instructive object-lesson in comparative archaeology" (1897: vii). In parts of southern England it has been shown that vermin traps played an important role in the management of rabbit warrens and now constitute a significant element of the archaeological landscape (Haynes, 1970). In the Middle East archaeologically visible animal traps have received little attention such that their variety and overall distributions cannot yet be assessed. The few exceptions include the numerous studies of 'desert kites' which are usually interpreted as a means of trapping gazelles (e.g. Helms and Betts, 1987) and the interpretation of rock art in southern Oman that appears to show the use of nets for trapping ibex (ElMahi, 2000). This brief preliminary look at the distribution of fox-traps in southeast Arabia nevertheless shows that in some places traps are an integral part of the archaeological landscape. As such they should rank alongside the wide variety of features that Wilkinson has recently tabulated as the "cultural features found in the Arabian desert" (Wilkinson, 2003: 175, Table 8.2). Described according to the same criteria used by Wilkinson the fox-traps of southeast Arabia can be seen as typical of the mountainous regions, usually located on the outskirts of small agricultural settlements and often on hill slopes. The socioeconomic context and function would be the control of predators and possibly the acquisition of food at times of acute shortage. This leaves one major question to be asked. All the examples of fox-traps cited above date from the recent, ethnographic past, and begs therefore the question, when were such traps first used?

The basic design principle of the stone built traps is no different from that of much smaller rodent traps made of pottery. Such traps are still made in some places (e.g. Thomas and Geoffroy, 1999: 56). but they also have a well documented ancestry that goes back to the Bronze Age. Examples have been found at the Egyptian site of Kahun, dating from c. 2000 BC (Fig. 6)<sup>5</sup> and examples of similar age are known from Syria, Bahrain and Iranian Baluchistan (Mosseri-Marlio, 2003: 312). There is no reason therefore why one day a fox-trap in southeast Arabia should not turn out to be just as old as the type of tomb they have sometimes been mistaken for !

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