

# TRIBULUS

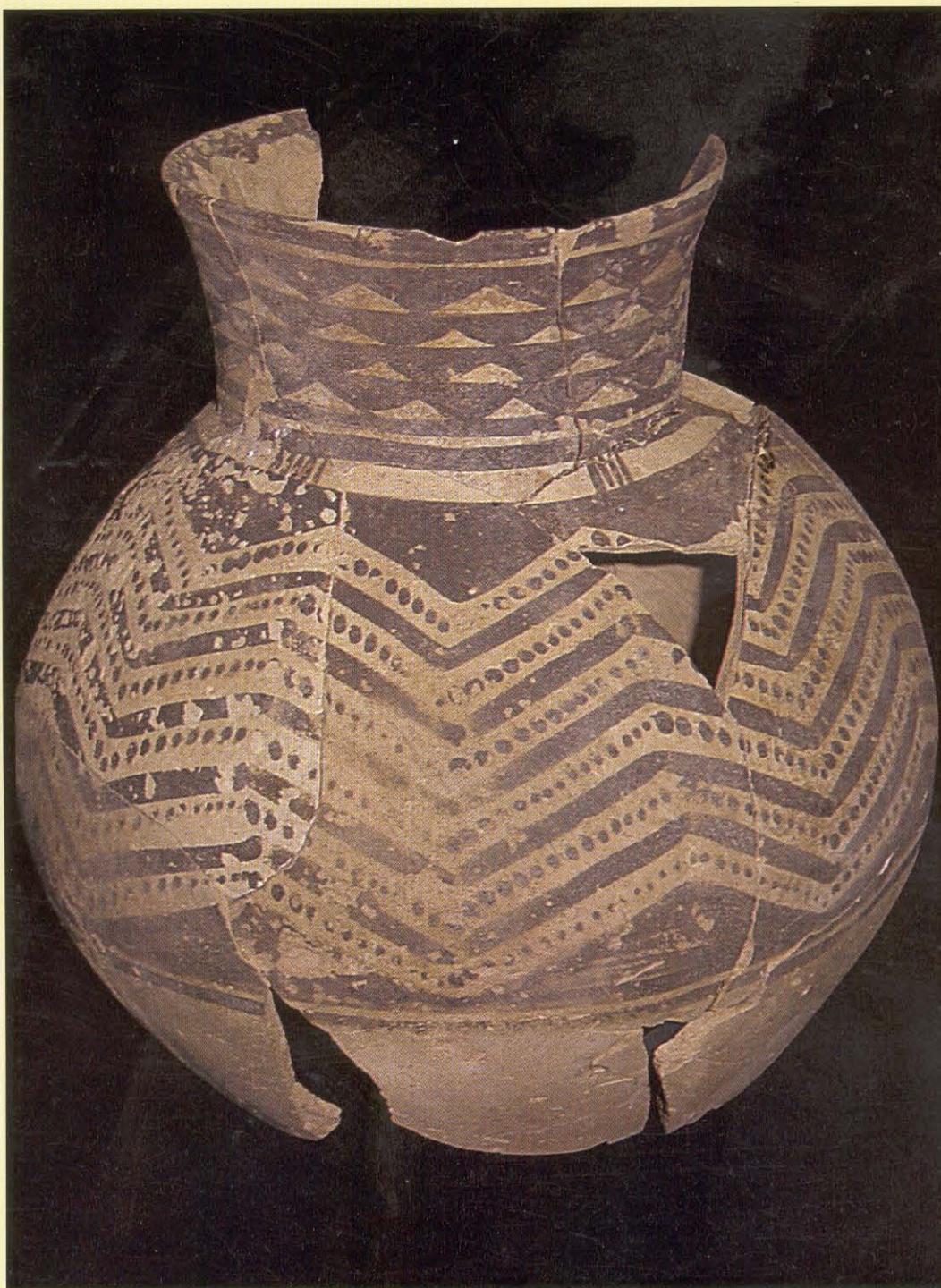


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Vol. 14.1

Spring/Summer 2004



# TRIBULUS

## NOTES FOR CONTRIBUTORS

TRIBULUS is the Journal of the Emirates Natural History Group and was launched in 1991. The Group was founded in 1976, and over the next fourteen years, 42 issues of a duplicated Bulletin were published.

TRIBULUS is published twice a year. The aim of the publication is to create and maintain in standard form a collection of recordings, articles and analysis on topics of regional natural history, heritage, geology, palaeontology and archaeology, with the emphasis on the United Arab Emirates and adjacent areas. Papers, short notes and other contributions are welcomed from anyone but should not have been published elsewhere. Guidelines are set out below. The information carried is as accurate as can be determined, in consultation with the Journal's Advisory Panel and referees, but opinions expressed are those of the authors alone.

All manuscripts received are reviewed by the Editorial Board and appropriate Advisory Panel members and, where appropriate, are also submitted to blind peer review.

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The plant motif above is of the genus *Tribulus*, of which there are six species in the UAE. They all have pinnate leaves, yellow flowers with free petals and distinctive five-segmented fruits. They are found throughout the country, except in coastal sabkha.

The animal motif above is of a tiny golden bull, excavated from the early Second Millennium grave at Qattarah, Al Ain. The original is on display in Al Ain Museum, and measures above 5 cm by 4 cm.

Manuscripts should be submitted in electronic form, with a printed copy, typed on one side only, and double-spaced. A short abstract should precede the article, with the address(es) of the author(s) at the end. Photographs may be submitted and should be clearly captioned. Line drawings and maps, if not submitted in electronic form, should be in black ink on strong white or translucent paper. References should give the author's name, with the year of publication in brackets, and with the list of articles, showing title and publisher, in date order. Scientific names should follow customary nomenclature in Latin, while the English and, if appropriate, available local Arabic names should also be supplied.

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**Front: An early 5th Millennium BC pot from Site MR-11, Marawah**

*Photograph by Mark Beech / ADIAS*

**Back: A dhub *Uromastix aegyptia microlepis* on Marawah (see page 23)**

*Photograph by Mark Beech*

The Editorial Board of TRIBULUS and the Committee of the Emirates Natural History Group acknowledge, with thanks, the support of the Group's Corporate members, a full list of whom can be found on Page 2, and without whom publication would be impossible. We also acknowledge the support and encouragement of our Patron, H.E. Sheikh Nahayan bin Mubarak Al Nahayan, UAE Minister of Higher Education and Scientific Research.

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## Reviews

Whales and Dolphins of Arabia. By Robert Baldwin. Privately published. 2003. Hardback 116 pp. ISBN 0 9526605 02 (e-mail: wosoman@omantel.net.om)

This self-contained book is the successor to Robert Baldwin's 'Whales and Dolphins of the United Arab Emirates', published in 1995. The size and format is an immediate improvement on that earlier work and you might want to, and easily could, carry it with you for reference in the field, although it is not specifically intended as a field guide.

'Whales and Dolphins of Arabia' is divided into three sections, of unequal length: The World of Whales and Dolphins; Arabian Whales and Dolphins and Whales, Dolphins and People.

The first section is a general account and deals with evolution, social structure, behaviour, communication, reproduction and various other aspects of cetacean biology. It concludes with a brief summary of 'migration and the Arabian enigma', without elaborating a plausible hypothesis, relating to cold-water upwelling off Dhofar in summer, as to what is thought to be going on (until you find it in a single sentence six pages later).

The second section, predictably the longest, commences by describing the marine environment around Arabia (geography, bathymetry, temperature, salinity etc), and then goes on to deal in turn with each of the twenty-one species definitely known to occur in and around Arabia, three Baleen whales and 18 Odontocete (toothed) whales and dolphins. Each is afforded one or, for ten species, two full pages, with liberal use of high-quality photographs which should help your identifications, a range map and information on the species' appearance, regional distribution, status and general biology, such as the diet.

The final section 'Whales, Dolphins and People' talks about the effects of the commercial whaling industry (with some startling catch statistics from the Arabian Sea in the 1960s), fisheries and management, habitat loss and protection, pollution and threats, then on to whale watching and conservation and research aspects, including DNA studies.

For 16 of the 21 species described the status is given as 'insufficiently known' and, not surprisingly, there is a message regarding the need not only for continued research but also for urgent conservation action.

This book is an easy read, suitable for those of 8 to 88, or more, and the author should be credited with the foresight in largely avoiding scientific terms throughout. The diversity of species that live around Arabia (admittedly largely outside the Arabian Gulf) will come as a surprise to many, as will the ease with which you can still see many of them - with just a little bit of effort and a small slice of luck. I thoroughly recommend you buy this book, and then a boat or helicopter of your own.

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[Whale and dolphin sightings can be sent to the Editors of Tribulus for inclusion on the UAE national cetacean database - Editors]

## Stone Age Sites and their Natural Environment – The Capital Area of Northern Oman Part III

By Hans-Peter Uerpmann & Margarethe Uerpmann, with a contribution by Stefan Scholer. 2003. Beihefte zum Tubinger Atlas des Vorderen Orients – Reihe A (Naturwissenschaften) Nr. 31/3. Publisher: Dr. Ludwig Reichert, Wiesbaden, Germany. 266 pages. 136 black and white figures. 46 tables.

This publication presents the results of archaeological work carried out by the authors in the Capital Area of Northern Oman between 1979 and 1988 under the sponsorship of the Department of Antiquities of the Ministry of National Heritage and Culture of the Sultanate of Oman. The volume is the third in a series of joint collaborative efforts made by members of the research team of the Tubingen Atlas Project, following earlier volumes on the geomorphology and palaeoenvironment (Hannss 1991) and climate (Hannss and Kurschner 1998) of the area.

This volume is dedicated to the detailed description of Stone Age sites and their findings and attempts to interpret the archaeological evidence and to develop a human paleoecology of this region. The main area covered in this study is the so-called Capital Area which includes the old towns of Muscat and Matrah and their newly urbanised surroundings from Madinat Qaboos in the west to Bandar Gissa in the east. The other sites dealt with in this volume are located in the Quriyat area, some 60km SE of Muscat.

Chapter 1 (pages 1-2) provides a Preface to the study. Chapter 2 (pages 3-26) gives an introduction to the sites of Ra's al-Hamra, Qurum, Wadi 'Udayy, the Saruq area, Bandar Gissa and Quriyat area. There is some discussion of the spatial distribution of sites, as well as the significance of the radiocarbon dating. Chapter 3 (pages 27-43) outlines the results of test excavations in Wadi Wutayya. It provides interesting information on the links between stratigraphy and rock art, suggesting that some of the oldest parts of the rock art in Wadi Wutayya may have originated during the Late Stone Age. The oldest fireplace in Wadi Wutayya was in use about 11,000 years ago, indicating that people existed in this area long before the arrival of Neolithic herders, who started to populate Arabia from the north-west more than a thousand years later. Wadi Wutayya is an important site as it provides a well-dated sequence through the whole of the Late Stone Age from the beginning of the Holocene to the beginning of the Bronze Age. Chapter 4 (pages 44-72) discusses the chipped stone industry and other finds from Wadi Wutayya, Wadi Udayy and Qurum regions and includes excellent illustrations of the lithics recovered. Chapter 5 (pages 73-93) presents the archaeological finds from the coastal sites at Ra's al-Hamra, Qurum and Saruq. Illustrations of the stone tools from Saruq are provided. Chapter 6 (pages 94-97) is a short note concerning work at Bandar Gissa. Shell-midden deposits under a rock-shelter site have been dated here to the first half of the 4th millennium BC. Chapter 7 (pages 98-142) discusses archaeological finds from the Quriyat area, covering the sites of Khor Milk 1 (KM1) and 2, and including the beautiful shell fish-hooks found at KM1. Chapter 8 (pages 143-162) is written by Stefan Schöler and provides a mineralogical and petrological examination of some of the objects found at Khor Milk. Beads were made from talc, calcite, chlorite and serpentinite, ear-

rings of serpentinite and clay-schist, and rasps from sandstone and apatite. Chapter 9 (pages 163-254) discusses the results of analysis of marine mollusca, fish, reptile, bird and mammalian remains from various sites. The richest assemblage discussed is that from Ra's Al-Hamra site 5 (RH5), which dates to between about 4000-3500 cal BC. Here the people regularly consumed shellfish (including *Terebralia palustris* and *Ostrea cuculata*), fish (especially tuna and jacks) and green turtles. Birds noted at RH5 include Great Cormorant, Purple Heron, Goliath Heron, a smaller unidentified heron and a large raptor, as well as several bones from sea-birds of the Gull and Tern families. Cetacean remains included bones from small and large dolphins, as well as from a Short-fin Pilot Whale. Hunted wild animals included hare, wolf, fox, caracal, wild ass, mountain gazelle and Arabian tahr. Domestic animals identified included cattle, sheep, goat and dog.

The final part of the book, chapter 10, provides an overview by the authors of the development of culture, subsistence and the environment in Northern Oman during the Late Stone Age. They conclude by mentioning the thousands of Hafit-type burial cairns scattered along mountain ridges of the Oman peninsula, and say that these provide evidence of a fairly dense population of nomadic herders, which have so far more or less escaped the interest of archaeologists. The authors go on to speculate that the large scatters of flint artifacts found in many parts of the interior, and exhibiting none of the characteristic implements of a known industry, may be the remains of these last nomadic Late Stone Age herders, who roamed the desert steppes during the final 4th and early 3rd millennium BC.

The present author cannot discuss this book without briefly passing some comments on the large samples of fish remains evaluated in this study. Fish bones represented 80% of the more than 60,000 faunal remains quantified from RH5. Numerically almost half of the identifiable bones belong to the Scombridae family (Tunas and Mackerels). The other major family represented were the jacks or Carangidae. Middle and smaller-sized fish only occurred in comparatively low numbers. This confirms the contrasting picture of fish resources modeled by the author within the Arabian Gulf and Gulf of Oman, more pelagic species being generally caught in the more open waters of the Indian Ocean (Beech 2004). The remains of these larger fish may have required fishing in deeper water which would have required some sort of boat. Such fish do, however, come close to shore on a seasonal basis when they target schooling sardines. It is possible that they may have, therefore, been also caught from the foot of the cliffs at the site. An interesting discovery within the graveyard of RH5 was a shark tooth found sticking in a human vertebra which indicates its use as a projectile point. This gives a whole new meaning to the danger of sharks out of water!

I have only a few minor criticisms, firstly that it is unfortunate that the faunal remains could not be studied evenly for all the studied sites dealt with in this book. Parts of the vertebrate assemblage were apparently not studied due to various logistical problems. This makes it very difficult to assess the quantitative relations between fish, turtle and mammal remains. At RH5 the authors conclude that green turtles between 60-90cm in carapace length were mostly exploited, and that these

were mostly immature. It is a pity that the complete turtle skulls and other bones from the graves at RH5 were not available for their study. Some of these appear to be quite large and may well be examples from large adult animals (Sandro Salvatori, pers. comm.). This might alter the interpretation of the assemblage being skewed towards immature individuals.

The analysis of the faunal material from the settlement area at RH5 has been treated as one unit, although the authors admit that "the animal bone complexes were only assigned to local features and could not be connected to the general chronology (p.165). Although separation of the fauna into sub-complexes would have led to an insufficient numerical basis for comparisons, it is a pity that more effort was not made to analyse the spatial distribution of environmental and archaeological data across the site. This might have produced more meaningful insights into domestic activities and waste disposal practices, e.g. differences between domestic and ritual activities may be hinted at by the discrepancy in the size of the green turtle remains in the cemetery and the settlement.

Sadly, the entire volume is produced in black and white and there are no colour pictures to illustrate the environments surrounding these sites and to illustrate some of the nicer archaeological finds. The inclusion of a summary in Arabic of the major conclusions from this study would also have been helpful. It might have been useful also to have had bi-lingual captions in Arabic and English for all the figures and tables. Such publications should be made available to a wider audience, and in particular to the local Arabic speaking peoples of the peninsula. Many modern day inhabitants of this region do not realise that the foundations of many of their present day coastal communities were laid in the Neolithic period, as long ago as 11,000 years ago, as we now know from Wadi Wutayya.

For those looking for a popular guide to Stone Age prehistoric sites in Oman, this is not it. There is still a need for someone to write an easy to read non-specialist guide to the early prehistoric coastal sites of the region. Putting aside these minor gripes, however, this book is a serious weighty academic contribution to our knowledge of the Neolithic period in South Eastern Arabia and will be an important source for years to come.

## References

- Beech, M.J. 2004. 'Abu Dhabi Islands Archaeological Survey Monograph 1 - In the Land of the Ichthyophagi: Modelling fish exploitation in the Arabian Gulf and Gulf of Oman from the 5th millennium BC to the Late Islamic period.' British Archaeological Reports International Series S1217. ArchaeoPress, Oxford. ISBN 1841715778.
- Hannss, C. 1991. 'Grünzüge der Reliefentwicklung (Basic Relief Development). The Capital Area of Northern Oman Teil I.' Beihefte zum TAVO Reihe A Nr.3111, Wiesbaden.
- Hannss, C. & H. Kurschner, 1998. 'The Capital Area of Northern Oman, Teil II. Beihefte zum TAVO Reihe A No. 3112. Wiesbaden.

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