

Bo Madsen

The Early Bronze Age Tombs of Jebel Hafit



The Early Bronze Age Tombs of Jebel Hafit

Danish Archaeological Investigations in Abu Dhabi
1961-1971

by Bo Madsen

with a contribution by Margarethe Uerpmann
and Hans-Peter Uerpmann

Jutland Archaeological Society Moesgaard Museum

Abu Dhabi Tourism & Culture Authority

The Early Bronze Age Tombs of Jebel Hafit

Danish Archaeological Investigations in Abu Dhabi 1961-1971

Bo Madsen © 2017

ISBN 978-87-93423-24-4

ISSN 0107-2854

Jutland Archaeological Society Publications vol. 93

Editing: Flemming Højlund

Layout: Narayana Press

Cover: Louise Hilmar

Drawings: Knud Thorvildsen, Arne Thorsteinsson, Vagn Kolstrup,
Jens Aarup Jensen, Jørgen Lund, Michael Beck, Niels Axel Boas, Steen
Andersen, Bo Madsen, Bente Fischer, Phine Wiborg, Peder Mortensen

Photos: Knud Thorvildsen, Arne Thorsteinsson, Vagn Kolstrup, Jens
Aarup Jensen, Jørgen Lund, Michael Beck, Niels Axel Boas, Steen
Andersen, Bo Madsen, Bo Lavindsgaard, Rogvi Johansen, Helle Strehle

Digitizing maps, plans and sections: Andreas Hegner Reinau, Phine
Wiborg, Jonatan Rose Andersen

English revision: Lisa Yeomans

E-book production by Narayana Press

*Published by Abu Dhabi Tourism & Culture Authority in cooperation with
Jutland Archaeological Society and Moesgaard Museum*

Contents

Preface	7
1. Introduction	9
2. History of investigation	11
3. The landscape and the environment	23
4. Danish investigations in the Jebel Hafit area	31
5. Excavation procedures	37
6. The mounds on the northern plateau	39
7. The mounds along the eastern mountain ridge	63
8. The mounds on the western mountain ridge	89
9. The mounds on the southern plateau	173
10. The mounds on the eastern side of the mountain	193
11. The finds and their context	217
12. Human skeletal remains	223
13. Funerary architecture	225
14. Secondary burials and later burial forms	235
15. Concluding discussion	237
Bibliography	239
Appendix. The camel bones from Tomb 1308, by M. and H.-P. Uerpmann	243

Preface

This book is the first of a series of planned publications resulting from an archaeological collaboration between the government of Abu Dhabi and archaeologists from the Moesgaard Museum in Denmark.

This remarkable relationship pre-dates the foundation of the United Arab Emirates in 1971, having been established by the late Sheikh Zayed bin Sultan Al Nahyan in the 1950s, and has been recently renewed through a new cooperation between Moesgaard Museum and the Abu Dhabi Tourism & Culture Authority (ADTCA).

The collaboration with Moesgaard Museum is intended to produce a series of peer-reviewed monographs on the historic work of the Danish team in Al Ain from 1961-1971. This series complements their earlier publications on the tombs and settlement on Umm an-Nar island. This new series is informed by the overall vision of ADTCA to provide the public not only with access to the archaeological sites and historic buildings within the cultural landscape of Al Ain but also detailed scientific information about its past produced by ongoing archaeological research and the publication of previous work. This strategy is guided by the vision of Abu Dhabi Tourism & Culture Authority. One of its main components is a programme of publication aimed at increasing public awareness and access to the Cultural Sites of Al Ain, the UNESCO World Heritage Site inscribed in June 2011. The World Heritage Site is composed of 17 sites, grouped into 4 distinct assemblages – Hafit, Hili, Bida Bint Saud & the Oases – that reflect both the interaction of Man and Nature within this unique cultural landscape and the long history of settlement in Al Ain over more than 5,000 years. The original exploration of these sites was conducted by the Danish team and the results of this work are the focus of this new series.

This first book in this series deals with the discovery and exploration of the earliest features of this

sequence, the Early Bronze Age tombs clustered on the slopes of Jebel Hafit, the massive and timeless landmark of Al Ain rising 1000m above the surrounding plain. The exploration of these tombs provided important information on the pre-cursor to the Umm an-Nar civilization which was also made famous by the Danish excavations on the island of the same name off the coast of Abu Dhabi. The tombs at Jebel Hafit marked a fundamental transformation in the relationship between humans and the environment in the region and may coincide with the emergence of oasis agriculture at the nearby site of Hili 8. A wide range of artifacts was discovered and indicate long-distance trade and the exploitation of local and imported resources, such as copper. Many of these artifacts can be seen in al-Ain National Museum, the first museum opened in the UAE.

The publication of this book is particularly timely in that it coincides with ongoing ADTCA work to develop the eastern slopes of Jebel Hafit as Mezyad Desert Park, thereby preserving and presenting the diverse elements of the natural and cultural landscape of Al Ain. Some of the tombs excavated by the Danish teams will form an integral part of this project.

Aside from the detailed archaeological description of the pioneering exploration of the tombs between 1961-1971 and the discussion of their typology and the various finds made during the work, the book also showcases a fascinating series of photographs that capture a unique moment in time for Al Ain, poised between the ancient landscape and the massive urban expansion which it has experienced in the past fifty years since those first explorations by the Danish archaeologists of Moesgaard Museum.

H.E. Mohamed Khalifa Al Mubarak
Chairman
Abu Dhabi Tourism & Culture Authority

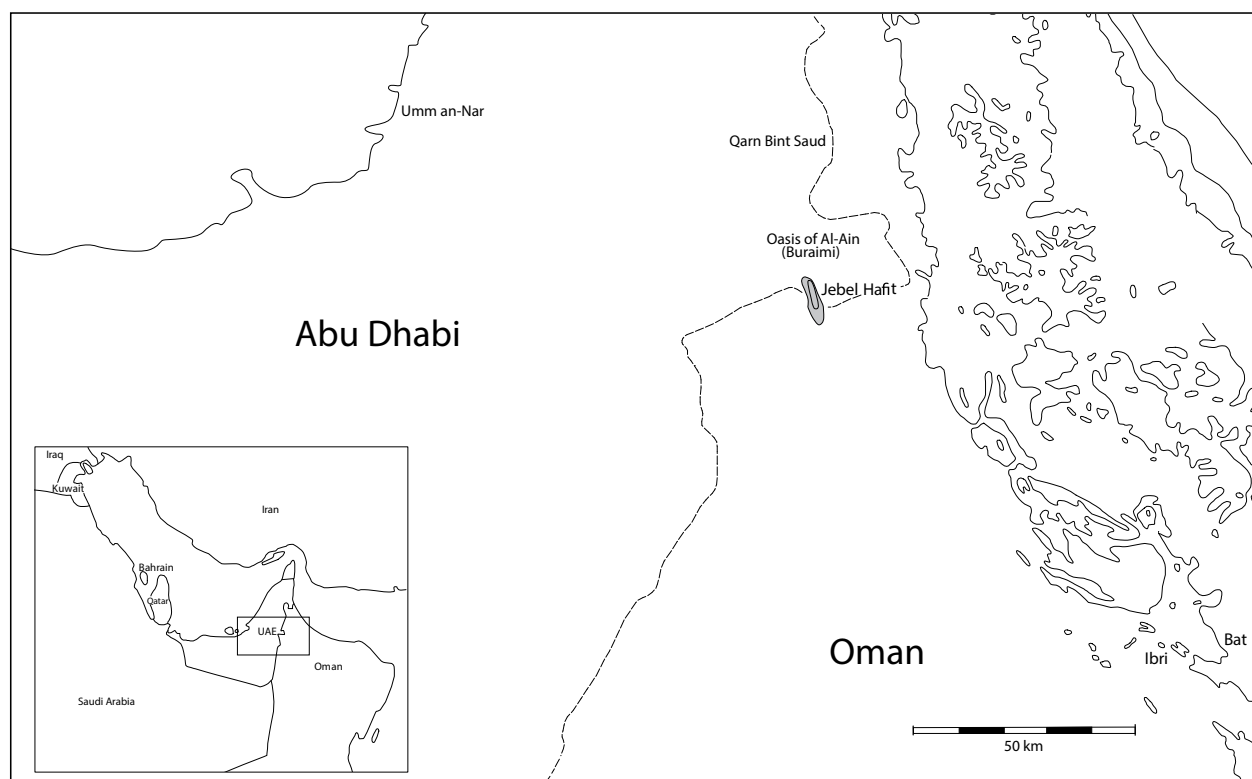


Fig. 1. Map of Abu Dhabi with excavation localities indicated.

1. Introduction

The burial monuments from Jebel Hafit published in this volume were investigated by teams from the Danish Moesgaard Museum between 1961 and 1971 (fig. 1). Through preliminary publications by Karen Frifelt (1971, 1975a-b, 1979, 1980, 2002), the finds from Jebel Hafit have become the foundation of our understanding of the beginning of the Bronze Age in South-East Arabia and it is the eponymous site of the *Hafit period*, which can be broadly dated to c. 3100-2700 BC.

The Jebel Hafit tombs consisted of “cairns of stones built up around a central corbelled chamber approached by a narrow entrance passage through the thickness of the mound, a length of up to two meters” (Bibby 1965 p. 105). Excavation of the chambers produced an assemblage of gravegoods, including pottery, copper objects and personal ornaments which alluded to the dating and cultural affinity of their occupants. Of special interest were a series of pottery vessels in shape and decoration identical to pottery from the Jemdet Nasr period in Mesopotamia. In some instances, preserved skeletal material has given an insight into the funerary practices of the monument builders. The investigations have also yielded important information on burial architecture, building techniques and materials, and the environmental setting of the tombs. The accumulation of hundreds of monuments in extensive mound fields points to the organizational capabilities of the communities responsible for the erection of these impressive monuments and is evidence of the pivotal role of tomb building in the funerary practices around 3000 BC.

The concentration of tombs around Jebel Hafit and their imported Mesopotamian gravegoods probably indicate the importance of this area in establishing the first trade in copper from the interior Oman peninsula to present day Iraq. As such, the Hafit culture stands as the precursor of the subsequent Umm an-Nar culture (c. 2700-2000 BC) that represents the flourish of Bronze Age civilization in Southeast Arabia (Carter & Tikriti 2004).

The Hafit tombs were sporadically used for secondary burials in the following periods, the Umm an-Nar period (c. 2700-2000 BC), the Wadi Suq period (c. 2000-1600 BC), the Late Bronze Age (c. 1600-1250 BC), the Iron Age and later pre-Islamic period (c. 1250 BC-c. 600 AD).

The extant volume contains 15 chapters and can be roughly divided into three parts: an introduction, chapters 1-5, which presents the historical events that led to the uncovering of such exceptional funerary remains; a second part, chapters 6-10, in which individual funerary structures are thoroughly described, and a third part, chapters 11-15 in which the components from descriptions of the individual tombs are synthesized in order to generate a more coherent interpretation of mortuary practices in early 3rd millennium BC. A camel's burial is dealt with in an appendix.

The basic field documentation is housed in the archives of the Oriental Department, Moesgaard Museum, Denmark. It consists of field plans and note books, black- and white photos and colour-slides in different formats. The find objects have been listed and briefly described on index cards by Frifelt. A small portion of the artefacts recovered at Jebel Hafit is still stored in the collections at Moesgaard Museum, but the majority was returned to Abu Dhabi in 1969-1971 after conservation, photographing, drawing and analysis.

Subsequent to the termination of each excavation season reports as well as find lists were submitted to the Ruler's Office in Abu Dhabi and later to the Department of Antiquities & Tourism, Al-Ain. Recently, several thousands of photos taken during the archaeological campaigns have been digitized and transferred to Abu Dhabi following a grant from the Abu Dhabi Authority for Culture and Heritage (*ADACH*), now Abu Dhabi Tourism and Culture Authority.

In 1968 Sheikh Zayed bin Sultan Al Nahyan, Ruler of Abu Dhabi, gave instructions to create a national museum in Al-Ain next to the historic Sultan Fort. This task was entrusted to the newly established Department of Antiquities & Tourism, which arranged the exhibition in cooperation with Frifelt and other staffmembers from Moesgaard Museum. In 1971 the new exhibition, including the finds from the Jebel Hafit tombs, was presented to a wider audience (Rahim 1979).

The preparation of the present manuscript by Bo Madsen took place in 2009-2010 and was made possible under the terms of an agreement of cooperation signed in 2008 between *ADACH* and Moesgaard Museum. The manuscript was edited by Flemming

Højlund in 2016. Other early excavations, e.g. the Hili-1 Bronze Age Tower, the Grand Tomb at Hili, and burials and rock art at Qarn (Bidaa) Bint Saud are also being prepared for publication (Madsen forthcoming a and b).

In 2011 Moesgaard Museum prepared an exhibition detailing the early years of archaeological exploration of Abu Dhabi. The exhibition, *The Dawn of History. Revealing the Ancient Past of Abu Dhabi*, was hosted at Al-Jahili Fort in Al-Ain and included a section dedicated to the Jebel Hafit burials (Anon. 2011). In 2011 the Hafit tombs were inscribed on UNESCO's World Heritage List as part of the *Cultural Sites of Al-Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)*.

For the support to publish the investigations at Jebel Hafit thanks are due to Sultan bin Tahnoon Al Nahyan, Chairman of ADACH; the Late Mohammed Khalaf Al-Mazrouei, Director General of ADACH; and Dr. Sami El Masri, Deputy Director General

of ADACH. In addition, we are indebted to Muhammed Amer Al-Neyadi, Director of the Historic Environment Department of Abu Dhabi Tourism & Culture Authority, for granting the funds for editing and printing the present volume. Thanks are also due to members of the staff of Abu Dhabi Tourism & Culture Authority, Dr. Walid Yasin Al Tikriti, Head of Archaeology Section and Peter Sheehan, Head of Historic Buildings & Landscapes Section, and to an anonymous reviewer for reading the draft text and offering constructive comments.

Special thanks go to the members of the teams who excavated at Jebel Hafit and established the foundation for the study of the Hafit Culture. For all of us who participated in the expeditions to Abu Dhabi, the excavations not only opened a door to the ancient and long forgotten Hafit Culture, but equally meeting the people and the landscape of Abu Dhabi gave us magnificent experiences and lifelong memories.

2. History of investigation

Archaeological explorations in Abu Dhabi were initiated in 1958 when P.V. Glob and T.G. Bibby were invited by the Ruler, Sheikh Shakhbut Bin Sultan Al Nahyan, to conduct an archaeological survey (Glob 1959a). At that time the Danish Gulf expeditions had spent four years investigating the archaeology and documenting the vanishing traditional cultures of Bahrain and Qatar. The operational base in Denmark was the provincial museum in Aarhus, later to become Moesgaard Museum. Professor P.V. Glob was Director of the museum, and he was assisted by T.G. Bibby, who had previously worked in Bahrain. The museum also acted as the Chair of Archaeology under the University of Aarhus. This was a most fruitful arrangement that provided a framework for the ongoing projects in the Arabian Gulf.

Sheikh Shakhbut Al Nahyan had described the existence of ancient structures and idols or imagery on the island of Umm an-Nar and through a liaison with the local oil company invited the Danes that were excavating on Bahrain to come for a survey in 1958. Sheikh Shakhbut encouraged the archaeologists to take a closer look at Umm an-Nar (Glob 1959a, Frifelt 1991, Højlund 2013). By the following year excavations had commenced on the island. Glob asked Harald Andersen to be in charge of the fieldwork. He was a meticulous excavator who at the time had a reputation for developing excavation methodology (Glob 1959b, Thorvildsen 1962, Frifelt 1991, 1995).

When members of the ruling family came to see the excavation of the first uncovered tomb at Umm an-Nar, Sheikh Zayed Bin Sultan Al Nahyan, then governor of the Eastern Province of Abu Dhabi, invited Glob and Bibby to come to Al-Ain (fig. 2). Sheikh Zayed wanted them to see places with even more mounds than the already impressive mound field at Umm an-Nar (Bibby 1969).

A week later Glob and Bibby with an experienced driver advanced through the sand tracks and dunes to Al-Ain to visit the legendary governor. In the early morning the Sheikh took them out to the prehistoric grave-mounds. Sheikh Zayed's interest in the country's ancient past and his strong personality left a deep impression. Both Glob and Bibby have vividly described the significant event (Glob 1968 p. 174, Bibby 1969 p. 211).

“...promptly at seven two open jeeps roared up before (the guest house), with Zayid himself, looking spruce and wide awake, driving the leading vehicle. We climbed into our two land-rovers and followed behind, along the steep-sided wadi which skirts Al-Ain, and out on the rough track along the valley leading toward Jebel Hafit.

On our left rose steep crags, and on our right a gentler rocky slope led up to a bluff overlooking the green valley. And as we approached the bluff we could see that the whole slope was covered with burial-mounds, steep-sided cairns of stones clustering most thickly along the very edge of the bluff. Zayid's jeep turned up the slope and stopped in the middle of the largest group of mounds. We dismounted and looked around.

Zayid's boast of hundreds of mounds was not idle. Around us on the ridge stood quite that number and as our eyes accustomed themselves to the landscape we could see mounds on every crag and crest and spur, all the way to Mount Hafit itself. Zayid turned to us with a lift of his eyebrows. “Yes”, we said, “gravemounds, from the Age of Ignorance.” (Bibby 1969).

The archaeologists loosely counted some 200 stone burial cairns at a first glance (fig. 3). They noted a diameter of roughly 12 m for the largest (a very preliminary measurement) and a height of more than 2 m for the tallest. It was immediately obvious that the as yet unexplored structures looked quite different from the tombs at Umm an-Nar, which were constructed with an outer cladding wall of well hewn or pecked ashlar. These tombs were constructed from un-worked, but somewhat selected stone blocks. They were seemingly situated or had mainly been preserved in more stony terrain. The first impression was that they lay exposed on raised plateaus, on hillocks and on the adjacent mountain slopes. The tombs were soon named after Jebel Hafit, the very prominent mountain raising its silhouette almost like a whaleback some ten kilometres south of Al-Ain and representing a notable marker in the landscape (Glob 1959b) (figs. 4-5, 9 and 12).

The excavations on the island of Umm an-Nar, especially the tombs, were given first priority until 1961. Afterwards the work was concentrated on the large settlement on the island, as well as investigations of the interior of Abu Dhabi. In these years an identification of the Umm an-Nar culture was



Fig. 2. The Ruler, Sheikh Shakbut Bin Sultan Al Nahyan, Sheikh Zayed Bin Sultan Al Nahyan, and other members of the ruling family with their retainers visit the excavations on Umm an-Nar in 1959.





Fig. 3. The northern plateau as it looked in 1961 seen from the north, with “mounds on every crag and crest and spur, all the way to Mount Hafit”.

established, and it was tentatively placed within the early part of the third millennium BC on the basis of a range of grave pottery either imported from the Iranian plateau or imitating such pottery (Thorvildsen 1962, Tosi 1989). Later these dates were modified to the middle of the millennium. The next challenge lay within the Hafit tombs at Al-Ain.

During the next two campaigns, 1961/62 and 1962/63, the excavation team started digging on Umm an-Nar and at the end of the winter season moved up to Al-Ain, where the climate was cooler and less humid.

At the time of their archaeological recognition, half a century ago, many of the prehistoric tombs of Abu Dhabi were already well known to local people. For generations they had observed them while riding by or when grazing their animals on the shrubs among them. The ruined mounds looked like no more than a heap of stone blocks and rubble and were considered to be ancient ruins or graves from a time before Islam.

In those years new materials began to replace traditional mud-brick architecture. A small scale production of cement for new housing, channels and roads had begun in Abu Dhabi as a consequence of a growing economy and a rising population. An increased need for limestone blocks to use in this

industry started to take a heavy toll on monuments built from un-worked stones that most people could move and handle (fig. 6). The introduction of small trucks and the first low price pick-ups, which could drive almost everywhere, similarly made it easy for the local villagers in need of foundation stones to fetch them in still more distant areas where suitable stones were easily accessed. In consequence, the early excavations in the Hafit area were carried out not just as research but also as rescue investigations.

For the first ten years, beginning in 1958, the excavations were supported by *Abu Dhabi Marine Areas Ltd* and the *Abu Dhabi Petroleum Company*. Moesgaard Museum also provided its own budget money and the Gulf investigations were supported from a range of institutions and foundations in Denmark, with the Carlsberg Foundation as the major supporter. At the end of the 1960s the Department of Antiquities & Tourism was established by a decree from the Ruler, Sheikh Zayed bin Sultan Al Nahyan, who closely followed the archaeological research. From then on the fieldwork received additional support from the Government of Abu Dhabi and logistically by the new department.

During the early years the results of the excavations were mainly reported in *Kuml*, yearbook of the