

# TAYMĀ' I

ARCHAEOLOGICAL EXPLORATION

PALAEOENVIRONMENT

CULTURAL CONTACTS

# TAYMĀ'

MULTIDISCIPLINARY SERIES  
ON THE RESULTS OF THE SAUDI-GERMAN  
ARCHAEOLOGICAL PROJECT

Edited by

Arnulf Hausleiter, Ricardo Eichmann, Muhammad al-Najem

Deutsches Archäologisches Institut, Orient-Abteilung

Saudi Commission for Tourism and National Heritage



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**with contributions by**

**Ariel M. Bagg, Helmut Brückner, Michèle Dinies, Ricardo Eichmann,  
Max Engel, Peter Frenzel, Andreas Ginau, Matthias Grottker,  
Arnulf Hausleiter, Benjamin Heemeier, Patrick Keilholz, Nicole Klasen,  
Harald Kürschner, Reinder Neef, Arno Patzelt, Martin Patzke,  
Anna Pint, Gunnar Sperveslage, Peter Voß, Kai Wellbrock**



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## FOREWORD

The archaeological excavations at Taymā' are part of a larger initiative of the Saudi Commission for Tourism and Heritage (SCTH) to systematically explore the rich history and cultural heritage of the Kingdom of Saudi Arabia. In addition to the activities of Saudi teams, SCTH's program addressed international research institutions and universities to participate to archaeological joint projects investigating sites all over the country.

The Saudi-German expedition by the SCTH and the German Archaeological Institute started in 2004, and in the meantime, there are almost 30 Saudi-international collaborative projects operating in the Kingdom. The efforts of these projects significantly contributed to a better understanding of the relationship between humans and their environments on the Arabian Peninsula from earliest times until today.

In order to intensify the international scientific exchange, SCTH held the 1<sup>st</sup> Saudi Archaeology Convention in 2017, combined with the "Roads of Arabia" exhibition, which displays numerous objects from Taymā'. It is planned to continue this forum on a biannual basis.

Archaeological and palaeoenvironmental research of the joint Saudi-German expedition at Taymā' led, amongst other, to the discovery of earliest oasis cultivation at the site more than 6,000 years before today. It was at that time when the foundations for a successful economic strategy were laid, resulting in Taymā' being one of the major hubs of the trans-Arabian communication networks.

The Saudi-German project at Taymā' put a significant emphasis on local cultural developments at Taymā' and within Northwest Arabia. This viewpoint contrasts previous views mainly considering external cultural, political and economic factors. It substantially adds to existing knowledge of the region as a highly dynamic area connected to neighbouring regions throughout all periods, highlighting the role of Arabia at the interface between both Africa and Asia and the Mediterranean and the East.

It is therefore, that we welcome the publication of this first volume of the Taymā' publication series. We express our thanks to all contributors to this volume for their immense work.

HRH Prince Sultan bin Salman bin Abdulaziz al-Sa'ud  
President of the Saudi Commission for Tourism and National Heritage



## INTRODUCTION

The present volume is the first one of a series dedicated to the publication of the results of the joint Saudi-German expedition at Taymā'. The collaborative project by the Saudi Commission for Tourism and Antiquities (SCTH) and the German Archaeological Institute (DAI) in Berlin, since 2004, has been conducting multidisciplinary research at one of the major sites in Northwest Arabia. Until now more than 20 seasons of fieldwork have been carried out.

Information by early Arab historians and geographers provided an image of Taymā' as a wealthy oasis during the early Islamic period. For the preceding periods, it was mainly sources from neighbouring areas, such as Assyria and Babylonia, underlining the role of this important site for the 1<sup>st</sup> millennium BCE incense trade between South Arabia and the Mediterranean.

However, based on the work of the Saudi-German joint expedition, it is now clear that the relevance of Taymā' and the Hejaz goes far more back in time. Already in the 3<sup>rd</sup> millennium BCE the oasis was surrounded by an impressive mud brick wall and was involved in pottery production. Subsequently, bronze objects of Syro-Levantine character are attested at the site, once again illustrating the involvement of this oasis into the known Bronze Age exchange networks attested elsewhere in the Near East. Throughout the periods the oasis was engaged with the Arabian trading networks, the incense road being only a part of it.

This book of the new Taymā' publication series not only informs about the exploration strategies of the Saudi-German project but provides results on palaeoenvironmental research. Based on proxy-data from the sediments of Taymā''s sabkha located north of the present-day oasis, new hypotheses on the Early Holocene climate and environment are drawn. The foundations of early oasis agriculture become increasingly visible. Fruit cultivation was significant from the beginning, whereas the date palm seems to be restricted to later periods. Hydrology and water management play a significant role for Taymā''s subsistence strategies, and pertaining research is part of the scientific program of the project. Taymā' always had sufficient groundwater supply which was mainly exploited by wells.

Last, but not least, two contributions deal with most relevant neighbours of Northwest Arabia with regard to culture, politics and economy, *i.e.* Egypt and Assyria. Especially the relationship between the latter and Arabia oscillates between trade and conflict, and it is the new excavations at Dumat al-Jandal which will shed further light on this particular scenario.

This first volume of the Taymā' publication series offers a collection of stimulating contributions to the research into the cultural heritage of Arabia, and we wish many more volumes to come, informing us about the history and archaeology of ancient Taymā'.

Professor Ali al-Ghabban  
General Supervisor of the Custodian of the  
Two Holy Mosques Program for Caring of  
the Kingdom's Cultural Heritage



## PREFACE

It is with great pleasure that we present the first volume of the publication series of the Saudi-German joint archaeological project at Taymā', Northwest Arabia. Over the years, the multi-disciplinary investigation, starting in 2004, produced a large quantity of new results, with the potential of changing previous views on the cultural development and the history of Northwest Arabia in general and on that of the oasis of Taymā' in particular. Thus, the Joint Saudi Arabian–German project at Taymā', carried out by the Saudi Commission for Tourism and National Heritage (SCTH), Riyadh, and the Orient Department of the German Archaeological Institute (DAI), Berlin, has not only advanced archaeological research but at the same time enriched the academic bilateral relations.

The first volume of the new series on Taymā' is aimed at contextualising the research at Taymā' by providing, on the one hand, new data on the ancient and modern environments and, on the other hand, reflections on cultural interaction with regard to Northwest Arabia; the latter was for many years impacted by the analysis of external sources. In the coming years our series will concentrate on the local cultural matrix of this large oasis, and, as expressed elsewhere, it is expected that the view on Taymā' through lenses from abroad will be increasingly replaced by an autochthonous perspective. Thus, connectivity, adaptation and exchange at this oasis will be considered under auspices quite different from those before. By uniting the contributions of this volume under the headlines archaeological exploration, palaeo-environment and cultural contacts, we not only emphasise that there is an interaction between these spheres, but also express our understanding of archaeology as historical scholarship.

The volume consists of three parts:

A synthesis of the archaeological exploration of Taymā', relying on the data provided by the Saudi-German project is offered by A. Hausleiter and R. Eichmann, aimed at contextualising research strategies and results from a mainly archaeological perspective.

The second part contains contributions on palaeoenvironment, vegetation and hydrology: New data on palaeo-environment, in particular observations on climatic change at Taymā', as based on the deposits in the *sabkha*, formerly an ancient palaeo-lake north of the oasis, is discussed by the geo-archaeological research unit mainly based at University of Cologne (formerly Marburg University) and composed of Helmut Brückner, Max Engel, Peter Frenzel, Andreas Ginau, Nicole Klasen, Martin Patzke and Anna Pint.

The lake sediments constitute an important geo-archive providing significant data for the reconstruction of Early-to-Mid Holocene climatic and environmental conditions. The research group on the history of vegetation and archaeobotany, *i.e.*, Harald Kürschner, Reinder Neef and Michele Dinies at Berlin's Free University, respectively at the Scientific Division at the DAI's head office, offers the first data from Taymā' and its surroundings, including aspects of ancient and recent vegetation.

A further substantial contribution dedicated to the primary resources framing human life in an oasis is presented in a first synthesis on the water management at Taymā', authored by the hydrological project group based at Lübeck's University of Applied Science, *i.e.*, Matthias Grottker, Benjamin Heemeier, Patrick Keilholz, Arno Patzelt, Peter Voß and Kai Wellbrock.

The third section presents contributions on contacts and exchange in the context of archaeological and textual sources: The relations between Egypt and Arabia are discussed by Gunnar Sperveslage. Ariel Bagg, with special regard to toponomastics, investigates the Assyrian–Arabian history. The contacts with the political entities in both regions have impacted the scholarly debate on Northwest Arabia for many years. Dealing with these two neighbouring regions, the particular cultural and geographical location of the Arabian Peninsula between Africa and Asia is emphasised.

The joint project would not have been possible without the support of several individuals and institutions in Saudi Arabia, to which we express our warmest thanks for generously supporting the project in person and with their staff:

- The President of the Saudi Commission for Tourism and National Heritage (SCTH), HRH Prince Sultan bin Salman bin Abdulaziz al-Sa'ud;
- The General Supervisor of the Custodian of the Two Holy Mosques Program for Caring of the Kingdom's Cultural Heritage, Professor Ali al-Ghabban;
- The Vice-President of STCH, Mr Jamal S. Omar;
- SCTH's Antiquities and Museums Sector Director General of Research and Survey, Dr Abdullah al-Zahrani;
- Former Deputy Ministers of Antiquities and Museums, Professors Dr Sa'ad al-Rashid and Dr Muhammad al-Ruweishid;
- Former Vice-President of SCTH, Dr Hussein Abu al-Hassan;
- Former Directors General of Research and Survey, Professors Dr Daifallah al-Talhi, Dr Abdulaziz al-Ghazzi, Dr Khalid Eskoubi, Mr Jamal S. Omar and Dr Abdullah Alsaud;
- The Director of the Antiquities Office at Taymā', Mr Muhammad H. al-Najem;
- The Dean of the King Abdullah Institute for Research and Consulting Studies, King Saud University, and former head of the College of Archaeology and Tourism, Professor Dr Said F. al-Said.

In Germany we received strong support for conducting the then first German archaeological project in the Kingdom, and we would like to express our gratitude to the following individuals:

- The current and former presidents of the German Archaeological Institute (DAI), Professors Dr Friederike Fless, Dr Hans-Joachim Gehrke and Dr Hermann Parzinger;
- The chairman for ancient cultures at the German Research Foundation (DFG), Dr Hans-Dieter Bienert, Bonn;
- The current and former ambassadors of the Federal Republic of Germany in Riyadh, Mr Dieter W. Haller, Mr Boris Ruge, Dr Volkmar Wenzel, Dr Volker Krieghoff and Dr Gerhard E. Schrömbgens and their staff, in particular the German Cultural Attaché as well as representatives of the administration;
- The current and former German Consuls General at Jeddah, Mr Holger Ziegeler, Ms Annette Klein, Dr Michael Zickerick, Dr Hubert Lang; special mention deserve the former Robert-Bosch Cultural Managers at the Consulate in Jeddah, Ms Miriam Seyffarth and Mr Christian Strob.

Our particular thanks go to the German Research Foundation (DFG), Bonn, as main sponsor of the German component of the project. Next to our Saudi colleagues, we are deeply indebted to all our staff in the field as well as in Berlin, contributing to the success of the project. We also thank the DAI administration for its efficient work all over the years.

We are very grateful to the reviewers of this publication for their valuable recommendations. Dr Dörte Rokitta-Krumnow typeset the entire volume; this work was completed by Susanna Wittmann-Gering. In the final stage, Dr Sebastiano Lora, Leticia Fernandez Michel and Ezel Güneş provided substantial help. Dr Anja Fügert, head of the editorial office of the DAI's Orient Department, successfully managed the publication process. Dr Peter Baumeister, head of the editorial office at the DAI's Head Office, provided valuable information regarding to the processing of the Open Access publication. The collaboration with Dr David Davison of Archaeopress was swift and pleasant. To all of them we are indebted in gratitude.

We would not like to conclude this preface without thanking the authors for their patience, since the present volume appears later than originally scheduled. They contributed with their great expertise to the success of the project.

Arnulf Hausleiter, Ricardo Eichmann