

# Advances in UAE Archaeology

Proceedings of Abu Dhabi's  
Archaeology Conference 2022



متحف زايد الوطني  
ZAYED NATIONAL  
MUSEUM

دائرة الثقافة والسياحة  
DEPARTMENT OF CULTURE  
AND TOURISM





ARCHAEOPRESS PUBLISHING LTD  
Summertown Pavilion  
18-24 Middle Way  
Summertown  
Oxford OX2 7LG  
www.archaeopress.com

ISBN 978-1-80327-673-1 (hardback)  
ISBN 978-1-80327-716-5 (paperback)  
ISBN 978-1-80327-674-8 (e-Pdf)

© Department of Culture and Tourism - Abu Dhabi and Archaeopress 2023

متحف زايد الوطني  
ZAYED NATIONAL  
MUSEUM

دائرة الثقافة والسياحة  
DEPARTMENT OF CULTURE  
AND TOURISM



Cover: Marawah Island. Photos by Noura Al Hameli

Design and layout: Robin Yule and Khajag Apelian

Editorial: Pascale El Fadi, Maureen Gannon, Kinan Al Shohof and Tareq Al Ghoul



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

This book is available direct from Archaeopress or from our website [www.archaeopress.com](http://www.archaeopress.com)

# Contents

- 7 **Authors**
- 11 **Foreword**  
HE Mohamed Khalifa Al Mubarak
- 13 **Stones in the landscape: Recent discoveries of Palaeolithic sites in the Eastern Region of Abu Dhabi emirate**  
Marc Händel, Norbert Buchinger, Ali Abdul Rahman Al Meqbali and Peter Magee
- 41 **Filling in the gaps: New evidence for Middle and Upper Palaeolithic occupations in the central region of Sharjah**  
Knut Bretzke and Sabah Jasim
- 51 **Understanding the late-stage Flandrian Transgression and palaeo-geographic evolution of the Abu Dhabi islands using remote sensing and marine geophysics**  
Richard Thorburn Howard Cuttler, Noura Al Hameli and Peter Magee
- 73 **Funerary practices within Mortuary Complex F: New insights from recent excavations on Marawah Island**  
Noura Al Hameli, Richard Thorburn Cuttler, Mark Jonathan Beech, Peter Magee, Kevin Lidour, Baptiste Pradier, Rémy Crassard, Howell Magnus Roberts and Áurea Izquierdo Zamora
- 103 **Preliminary comparative lithic analyses from the Neolithic sites of Marawah and Ghagha islands (emirate of Abu Dhabi, UAE)**  
Rémy Crassard, Noura Hamad Al Hameli, Mark Jonathan Beech and Richard Thorburn Howard Cuttler
- 115 **Recent archaeological investigations at Umm an-Nar Island (Sas Al Nakhl)**  
Ali Abdul Rahman Al Meqbali and Daniel Eddisford with Michel de Vreeze, Diaeddin Tawalbeh, Hamad Fadel, Abdulla Al Yammahi, Hager Hasan Almenhali and Sam Botan
- 147 **Kalba: Main results of the renewed fieldwork during the campaigns of 2019-2022**  
Christoph Schwall and Michael Brandl
- 157 **Insights on the Late Bronze Age economy in south-eastern Arabia: Self-sufficiency and exchanges in Masafi-5**  
Maria Paola Pellegrino, Julien Charbonnier, Anne Benoist, Delphine Decruyenaere, Kevin Lidour, Michele Degli Esposti and Aurélien Hamel
- 183 **Another side to the story: Preliminary results from the renewed excavations on the eastern flank of Tell Abraq (2021-2022)**  
Michele Degli Esposti, Federico Borgi, Maria Paola Pellegrino, Rania Hussein Kannouma with Camille Abric and Francesca Barchiesi

- 209 'We should build with the stones we have': An assessment of the Al Ain Oasis during the Iron Age based on the soft-stone vessels from the Oman Border Fence  
Eric Olijdam
- 239 Iron Age copper production and the 'ritual economy' of Saruq al-Hadid (Dubai, UAE)  
Lloyd Weeks, Tatiana Valente, Kristina Franke, Fernando Contreras, Mansour Boraik Radwan and Hassan Zein
- 271 Cultures, technologies and environment on the Oman Peninsula: Recent discoveries and some hypotheses about the *falaj* system in Al Madam, Sharjah, UAE  
Carlos Fernández and Carmen del Cerro
- 293 Secrets of the shaabiyat: Recent developments in the archaeology of the (urban) oasis landscape of Al Ain  
Peter Sheehan, Mohammed Khalifa, Malak Al Ajou and Nour Nasser Al Marzooqi
- 307 The discovery of a Late Antique and Early Islamic monastery on Siniya Island, Umm Al Quwain  
Timothy Power, Michele Degli Esposti, Robert Hoyland and Rania Hussein Kannouma
- 331 The Early Islamic period in Al Ain in light of recent archaeological discoveries  
Diaeddin Tawalbeh
- 353 Conserving and protecting the Early Islamic Site at Ūd al-Tawba in Al Ain  
Ola Shaker, Felipe Gutierrez, Diaeddin Tawalbeh and Amel Chabbi
- 377 New evidence for the Early Islamic landscape of Al Ain: Fieldwalking and surface ceramics from Slemi, Jimi Region  
Nour Nasser Al Marzooqi, Peter Sheehan, Timothy Power, Malak Al Ajou with Afnan Zayed Al Zeyoudi, Asma Humaid Al Badi, Aysha Awad Al Neyadi, Hessa Said Al Shamsi, Khuloud Juma Al Nuaimi, Sarah Salem Al Yammahi, Suhaila Salem Al Mansoori, Zainab Sulayman Nehis and Thamer Al Sayah
- 393 The UNESCO World Heritage Site of Al Ain: Management approaches  
Abdulrahman Al Nuaimi
- 429 Developing a Historic Environment Record system for the management of heritage resources in the emirate of Abu Dhabi  
Tariq Yousif Alhammadi, Richard Thorburn Howard Cuttler, Mark Jonathan Beech and Ahmed Abdalla El Faki
- 447 Historic mosque architecture in Abu Dhabi  
Hamdan Rashed Al Rashedi

## Authors

**Malak Al Ajou** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. [MAjou@dctabudhabi.ae](mailto:MAjou@dctabudhabi.ae)

**Mark Jonathan Beech** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. [mark.beech@dctabudhabi.ae](mailto:mark.beech@dctabudhabi.ae)

**Anne Benoist** French National Centre for Scientific Research (CNRS), Archéorient, Maison de l'Orient et de la Méditerranée, 7 rue Raulin, 69365 Lyon Cedex 9, France. [anne.benoist@mom.fr](mailto:anne.benoist@mom.fr)

**Mansour Boraik Radwan** Dubai Municipality – Architectural Heritage and Antiquities Department, Restoration House, Al-Shindagha, Dubai, United Arab Emirates. [mbkarim@dm.gov.ae](mailto:mbkarim@dm.gov.ae)

**Federico Borgi** Italian Archaeological Mission in Umm Al Quwain, Via Orfeo 16, 40124 Bologna, Italy. [federico.borgi@gmail.com](mailto:federico.borgi@gmail.com)

**Michael Brandl** Department of Prehistory and Western Asian/Northeast African Archaeology, Austrian Archaeological Institute (OeAI), Austrian Academy of Sciences (AAS), Georg-Coch-Platz 2, A-1010 Vienna, Austria. [michael.brandl@oeaw.ac.at](mailto:michael.brandl@oeaw.ac.at)

**Knut Bretzke** German Mission to Sharjah, University of Tübingen, Dept. Early Prehistory and Quaternary Ecology, Burgsteige 11, 72070 Tübingen, Germany. University of Jena, Dept. Pre- and Protohistoric Archaeology, Löbdergraben 24a, 07743 Jena, Germany. [knut.bretzke@uni-tuebingen.de](mailto:knut.bretzke@uni-tuebingen.de)

**Norbert Buchinger** Austrian Archaeological Institute, Austrian Academy of Sciences, Georg Coch-Platz 2, 1010 Vienna, Austria. [norbert.buchinger@oeaw.ac.at](mailto:norbert.buchinger@oeaw.ac.at)

**Amel Chabbi** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. [amel.chabbi@dctabudhabi.ae](mailto:amel.chabbi@dctabudhabi.ae)

**Julien Charbonnier** Archaïos, 20 rue des Gravilliers, 75003 Paris, France. [julcharbonnier@gmail.com](mailto:julcharbonnier@gmail.com)

**Fernando Contreras** Sanisera Archaeology Institute, P.O. Box 68, 07740, Mercadal (Menorca), Balearic Islands, Spain. [info@archaeology.institute](mailto:info@archaeology.institute)

**Rémy Crassard** CNRS, Archéorient UMR 5133, 7 rue Raulin, 69007 Lyon, France. [remy.crassard@cnrs.fr](mailto:remy.crassard@cnrs.fr)

**Richard Thorburn Howard Cuttler** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. [rcuttler@dctabudhabi.ae](mailto:rcuttler@dctabudhabi.ae)

**Delphine Decruyenaere** CNRS et MNHN, Archéozoologie, Archéobotanique: Sociétés, Pratiques et Environnements (AASPE/ UMR 7209), 55 Rue Buffon, Paris, France. [decruyenaere.d@gmail.com](mailto:decruyenaere.d@gmail.com)

**Michele Degli Esposti** Italian Archaeological Mission in Umm Al Quwain and Institute for Mediterranean and Oriental Cultures – Polish Academy of Sciences, Poland. [mdegliespsti@iksio.pan.pl](mailto:mdegliespsti@iksio.pan.pl)

**Carmen Del Cerro Linares** Autonomous University of Madrid, Office 3.06-II, Faculty of Fine Arts, Autonomous University of Madrid. [carmen.delcerro@uam.es](mailto:carmen.delcerro@uam.es)

**Daniel Eddisford** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. [DEddisford@dctabudhabi.ae](mailto:DEddisford@dctabudhabi.ae)  
Durham University, Dept of Archaeology, Durham University, South Road, Durham, DH1 3LE, United Kingdom. [d.m.eddisford@durham.ac.uk](mailto:d.m.eddisford@durham.ac.uk)

**Ahmed Abdalla El Faki** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. [ahmed.elfaki@dctabudhabi.ae](mailto:ahmed.elfaki@dctabudhabi.ae)

**Carlos Fernández Rodríguez** Autonomous University of Madrid, Office 3.09-VII, Faculty of Fine Arts, Autonomous University of Madrid, Spain. *carlos.fernandez01@uam.es*

**Kristina A. Franke** Institute of Archaeological Studies, Ruhr-Universität Bochum, Germany. *kristina.franke@ruhr-uni-bochum.de*

**Felipe Gutierrez** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *fgutierrez@dctabudhabi.ae*

**Aurélien Hamel** Service du Patrimoine et de l'Archéologie, Département de la Vendée, France. *aurelien.hamel@loiret.fr*

**Noura Hamad Al Hameli** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *nhalhameli@dctabudhabi.ae*

**Tariq Yousif Alhammadi** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *thammadi@dctabudhabi.ae*

**Marc Händel** Austrian Archaeological Institute, Austrian Academy of Sciences, Georg Coch-Platz 2, 1010 Vienna, Austria. *marc.haendel@oeaw.ac.at*

**Robert Hoyland** Institute for the Study of the Ancient World, New York University, 15 East 84th St., New York, NY 10028. *rgh2@nyu.edu*

**Rania Hussein Kannouma** Tourism and Archaeology Department, Government of Umm Al Quwain, P.O. Box 1500, Umm Al Quwain, United Arab Emirates. *rania.kannouma@tad.uaqgov.ae*

**Áurea Izquierdo Zamora** University of Alcalá de Henares, Calle de Gonzalo de Berceo, 25 3ª, 28017 Madrid, Spain. *aureaizquierdo@gmail.com*

**Sabah A. Jasim** Sharjah Archaeology Authority, Sheikh Rashid Bin Saqr Al Qasimi St – S115, Sharjah, United Arab Emirates. *sabah.jasim@gmail.com*

**Mohammed Khalifa** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *Mohamed.khalifa@dctabudhabi.ae*

**Kevin Lidour** Instituto Internacional de Investigaciones Prehistóricas (IIIPC) de Cantabria, Universidad de Cantabria. Avenida de los Castros, 52, 39005 Santander, Spain. *Lidouro1@gmail.com*

**Peter Magee** Director, Zayed National Museum, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *PMagee@zayednationalmuseum.ae*

**Nour Nasser Al Marzooqi** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *NMarzooqi@dctabudhabi.ae*

**Ali Abdul Rahman Al Meqbali** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *ali.almeqbali@dctabudhabi.ae*

**Abdulrahman Al Nuaimi** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates. *abdulrahman.alnuaimi@dctabudhabi.ae*

**Eric Olijdam** Leiden University, Adriaan Butijnweg 1, 4411 BT Rilland, The Netherlands. *olijdam@zeelandnet.nl*

**Maria Paola Pellegrino** Archaïos, 20 rue des Gravilliers, 75003 Paris, France. *maria.pellegrino9@studio.unibo.it*

**Timothy Power** College of Humanities and Social Science, United Arab Emirates University, Al Ain, Abu Dhabi, United Arab Emirates. *timothy.power@uaeu.ac.ae*

**Baptiste Pradier** UMR 8068, TEMPS Maison de l'Archéologie et de l'Ethnologie, 21 allée de l'Université, 92023, Nanterre cedex, France. *baptiste.pradier@gmail.com*

**Hamdan Rashed Al Rashedi** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates.  
*hamdan.alrashedi@dctabudhabi.ae*

**Howell Magnus Roberts** Universitetsmuseet i Bergen, Postboks 7800, NO-5020 Bergen, Norway.  
*How-ell.Roberts@gmail.com*

**Christoph Schwall** Leibniz-Zentrum für Archäologie (LEIZA), Ludwig-Lindenschmit-Forum 1, D-55116 Mainz, Germany.  
*christoph.schwall@leiza.de*

**Ola Shaker** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates.  
*OShaker@dctabudhabi.ae*

**Peter Sheehan** Historic Environment Department, Department of Culture and Tourism – Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates.  
*peter.sheehan@dctabudhabi.ae*

**Diaeddin Tawalbeh** Historic Environment Department, Department of Culture and Tourism - Abu Dhabi, P.O. Box 94000, Abu Dhabi, United Arab Emirates.  
*diaeddin.altawallbeh@dctabudhabi.ae*

**Tatiana Valente** Department of Heritage Studies, Faculty of Arts and Humanities of Porto University, Porto, Portugal. *tatival@msn.com*

**Lloyd Weeks** Department of Archaeology, Classics and History, School of Humanities, Arts and Social Sciences, University of New England, Armidale NSW 2351, Australia. *lweeks2@une.edu.au*

**Hassan Zein** Dubai Municipality – Architectural Heritage and Antiquities Department, Restoration House, Al-Shindagha, Dubai, United Arab Emirates.  
*hmzein@dm.gov.ae*

