

Umm al-Quwain 2
A Neolithic settlement and graveyard in the United Arab Emirates





Umm al-Quwain 2

A Neolithic settlement and graveyard in the United Arab Emirates

Edited by
Sophie Méry and Kevin Lidour

ARCHAEOPRESS ARCHAEOLOGY



ARCHAEOPRESS PUBLISHING LTD

13-14 Market Square

Bicester

Oxfordshire OX26 6AD

United Kingdom

www.archaeopress.com

ISBN 978-1-80583-125-9

ISBN 978-1-80583-126-6 (e-Pdf)

© the individual authors and Archaeopress 2025

Cover: UAQ2 Tomb 1, second half of the 6th millennium BCE; Projectile point (chalcedony) found in the rib cage of Individual D from Tomb 1.



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

Contents

List of Figures	ii
List of Tables.....	vi
Acknowledgements	vii
List of contributors	viii
Preface	x
Introduction	xi
S. Méry, K. Lidour	
Contextualising Research and Excavation Narrative at UAQ2	1
S. Méry, K. Lidour, D. Gasparini	
The UAQ2 Graveyard – Biological anthropology and funerary practices	53
S. Méry, K. Lidour, K. McSweeney	
Chronology, Geoarchaeology and Palaeoenvironments.....	70
A. Parker, G. Preston, A. Goudie, F. Borgi, M. Degli Esposti, J.-F. Berger, S. Méry, K. Lidour, S. Lindauer, F. Preusser	
Material culture – Technology, typology, provenance and exchange in the Arabian Neolithic.....	96
K. Lidour, S. Méry, C. Gallou, O. Brunet	
Animal economy and subsistence strategies at UAQ2	162
K. Lidour, S. Méry, M.J. Beech, L. Yeomans, M. Mashkour, K. Debue, S. Bréhard, C. Dupont, J. Martin	
Conclusion	201
S. Méry, K. Lidour	
Appendix 1.....	209
Appendix 2.....	210
Appendix 3	211
Appendix 4.....	212
Bibliography	213

List of Figures and Tables

Figure 1.1. Map of the Arabian Gulf and northern Oman with the main Neolithic sites	2
Figure 1.2. Map of the Umm al-Quwain coastal area with the location of the Neolithic sites	3
Figure 1.3. General view of UAQ2 in 2009 from the southern slope of the dune	6
Figure 1.4. Natural section visible on the southern slope of the dune in 2009	6
Figure 1.5. Dense layers of marine bivalves in the upper stratigraphy.....	7
Figure 1.6. Ubaid sherd showing a painted herringbone pattern sticking out of the section.....	8
Figure 1.7. Drawing of the 2009 natural section.....	8
Figure 1.8. Talus of a large terrestrial mammal found at the surface of the site in 2009	8
Figure 1.9. Sample of Ubaid pottery found at the surface of the site in 2009	9
Figure 1.10. Crushing stone, tile knife, and some of the stone fishing sinkers found at the surface of the site in 2009.....	9
Figure 1.11. Sample of lithic implements found at the surface of the site in 2009.....	9
Figure 1.12. General plan of the sectors and test-trenches excavated at UAQ2.....	11
Figure 1.13. F. Borgi using the 2.50 m high pole for vertical photos (2012).....	11
Figure 1.14. O. Brunet and R. Hussein Kamnouma using the sieve (2012)	12
Figure 1.15. East section of Sector 1+2 in square B5 'Deep-sounding'	13
Figure 1.16. North section (Section 14) of Sector 7	14
Figure 1.17. Excavation of Level 3 in Sector 1 (2011).....	15
Figure 1.18. Excavation of Level 9 in Sector 1 (2011).....	15
Figure 1.19. East section (Section 3) of Sector 1+2 (2012)	15
Figure 1.20. Three post-holes appearing along the East section of Sector 1, Level 9 (2011).....	16
Figure 1.21. O. Brunet excavating one of the post-hole found in Level 9 (2011).....	16
Figure 1.22. Mechanical shovel excavating the top layers of Sector 2 (2012).....	17
Figure 1.23. Fusiform projectile point (UAQ2.556) in Level 12, Sector 1 (2012)	18
Figure 1.24. Removal of the top layer by F. Borgi in Sector 3 (2012).....	19
Figure 1.25. F. Borgi cleaning the North section (Section 13) of Sector 3 (2012)	19
Figure 1.26. Removal of the top layer by O. Brunet in Sector 4 (2012)	19
Figure 1.27. Aerial view of Sector 4 showing the numerous post-holes associated with Level 3 (2012).....	20
Figure 1.28. J. Martin opening Sector 5 from the limits of the 1990s excavations – Sector 3 is visible on the right (2012)	20
Figure 1.29. Extension of Sector 5 when the first grave (Tomb 2) was discovered – visible in the corner to the right (2012)	20
Figure 1.30. D. Gasparini and K. Lidour excavating Level 12 in Sector 1+2 – dark patches visible on the ground correspond to the remains of hearths and post-holes (2013)	21
Figure 1.31. Tomb 1 (multiple burial) revealed under the skeleton found in 2012 (Tomb 2) (2013).....	22
Figure 1.32. View of Level 15 in Sector 1+2 showing several post-holes (2014)	22
Figure 1.33. General plan of the sectors and test-trenches excavated at UAQ2 with the location of the sections documented	23
Figure 1.34. Satellite view of the UAQ2 area and the sabkha located further north with the location of the soundings excavated and the cores sampled.....	23
Figure 1.35. M. Degli Esposti supervising the CL1 sounding (2017)	24
Figure 1.36. F. Borgi recording GIS points for the documentation of TT3 (2017)	24
Figure 1.37. View of Sector 6 and TT3 (2017).....	24
Figure 1.38. Sections 16-18 documenting the stratigraphy of TT3 on the northern slope of UAQ2.....	25
Figure 1.39. View of Sector 7 located on the southern slope of the site – photo taken across Sector 1+2 (2017)	25
Figure 1.40. View of Section 14 in Sector 7 and of Level 17 showing a thin layer of bivalves (2017)	25
Figure 1.41. Detail of Level 17 as it has been exposed in Sector 7 (2017)	26
Figure 1.42. Plan of Level 14 (second occupation floor) in Sector 1+2.....	27
Figure 1.43. Examples of post-holes excavated in Level 14, Sector 1+2.....	28
Figure 1.44. Examples of shell concentrations excavated in Level 14, Sector 1+2	28
Figure 1.45. Plan of Level 14 (first occupation floor) in Sector 1+2	29
Figure 1.46. Aerial view of the burials (Tombs 1 and 2) excavated in the graveyard, Sector 5 (2013).....	30
Figure 1.47. Cluster of ten stone fishing sinkers (C13) found in the vicinity of the burials, in Sector 5 (2012).....	31
Figure 1.48. Fireplace F34 along the West section (Section 16) in Sector 6 (2017)	31
Figure 1.49. Detail of Tomb 2, showing an array of shell beads close to the hips of the deceased (2012)	32
Figure 1.50. Detail of two pearls found in association with one of the Tomb 1 individuals (2013).....	33
Figure 1.51. Location of the chalcedony point UAQ2.2526 found in association with Individual D in Tomb 1 (2013)	33
Figure 1.52. Elliptical scraper on blade, found in Level 14 (Sector 1+2) (2014)	34
Figure 1.53. Detail of the two polished stone adzes found in the same shallow pit in Level 14 – the cutting edges point upwards. On the left, UAQ2.2587; on the right, UAQ2.2586 (2014).....	34
Figure 1.54. Plan of Level 13 in Sector 1+2.....	35
Figure 1.55. Detail of fish backbone from Level 13, Sector 1+2 (2013)	35
Figure 1.56. Detail of a small cluster of disc bead rough-outs made of <i>Spondylus spinosus</i> shell (C28) (2014)	35
Figure 1.57. Small cluster of a fragment of <i>Pinna bicolor</i> valve with a scraper on blade underneath, plus two valves of <i>Marcia</i> sp. and <i>Circe</i> sp. (square C3 in Level 13 – Sector 1+2) (2012)	36
Figure 1.58. Short fusiform point (UAQ2.2312) found in Level 13, Sector 1+2 (2013)	36
Figure 1.59. Plan of Level 12 in Sector 1+2.....	37
Figure 1.60. Shell concentration C27 in Level 12, Sector 1+2 (2013)	38

Figure 1.61. Detail of fish backbone (<i>Euthynnus affinis</i>) in the concentration C25, Level 12, Sector 1+2 (2013)	38
Figure 1.62. Example of Ubaid sherd found associated with Level 12 (left: UAQ2.466; right: UAQ2.148) (2012).....	38
Figure 1.63. Elliptical scraper on blade UAQ2.1527 found in Level 12, Sector 1+2 (2012)	38
Figure 1.64. Plan of Level 11 in Sector 1+2.....	39
Figure 1.65. Hearth F24 in Level 11, Sector 1+2 (2012)	40
Figure 1.66. Bead made from a perforated <i>Polinices mammilla</i> shell (UAQ2.654) found in Level 11, Sector 1+2 (2012).....	40
Figure 1.67. Potential remains of a shell bead bracelet found in square A2 in Level 11, Sector 1+2 (2012).....	40
Figure 1.68. Examples of projectile points and scrapers on blade found in Level 11, Sector 1+2 (2012).....	41
Figure 1.69. Examples of shell tools found in Level 11, Sector 1+2 (2012).....	41
Figure 1.70. Cluster of stone fishing sinkers (C24) found in square G2 in Level 11, Sector 1+2 (2012)	42
Figure 1.71. Detail of the surface of Level 10, showing scarce seashell fragments but no archaeological structures, Sector 1 (2011).42	42
Figure 1.72. Detail of the surface of Level 9, showing denser deposits of shell valves lying flat, Sector 1 (2011)	44
Figure 1.73. Removal of Level 8 in Sector 1 – the dense accumulation of sand visible in the section (2011).....	44
Figure 1.74. View of Level 7 in Sector 1 with the location of C3 and C4 (clusters of burnt stones) (2011)	46
Figure 1.75. View of the South section of Sector 1 prior to the removal of Level 6 – a dense accumulation of sand which is visible in the upper half of the section (2011).....	46
Figure 1.76. Post-holes TP9 and TP13 associated with Level 6 in Sector 3 (2012).....	47
Figure 1.77. Short fusiform point (UAQ2.906) found in Level 6, Sector 3 (2012).....	47
Figure 1.78. Hearth F12 in Level 5, Sector 3 (2012)	49
Figure 1.79. Level 4 in Sector 1, showing dense deposits of seashells (2011)	49
Figure 1.80. Level 3 in Sector 1, showing lesser dense deposits of seashells in a fine yellowish brown sand matrix (2011).....	49
Figure 1.81. Aerial view of Level 3 in Sector 4 with the remains of rounded dwellings evidenced by the presence of numerous post-holes (2012)	50
Figure 1.82. Level 2 in Sector 1, showing dense deposits of burnt and crushed seashells (2011)	50
Figure 1.83. Detail of Level 2 in Sector 1 (2011)	50
Figure 1.84. Shell concentration C5 in Level 2, Sector 3 (2011)	51
Figure 1.85. O. Brunet and H. Attia Edris excavating Level 1 (top layer of the site) in Sector 1 (2011)	51
Figure 2.1. Plan of the UAQ2 graveyard excavated in the early 1990s. Credit: C.S. Phillips	54
Figure 2.2. Plan showing the location of the skeletons identified in 2012: Individual A from Tomb 1; Individual E from Tomb 2.; The remains of a potential Individual F have been identified – probably belonging to a skeleton that has been disturbed.....	55
Figure 2.3. Detail of the Individual F remains.....	55
Figure 2.4. Individual E from Tomb 2	57
Figure 2.5. Tombs 1 and 2 during their excavation in 2013.....	57
Figure 2.6. General view of Tombs 1 and 2.....	58
Figure 2.7. Detail of the Individual A skull.....	59
Figure 2.8. Detail of the Individual B skull.....	59
Figure 2.9. Detail of the Individual C skull.....	60
Figure 2.10. Detail of the Individual D skull.....	60
Figure 2.11. Detail of the Individual E skull	60
Figure 2.12. General view of Tomb 2 showing the row of shell beads along the hip of Individual E.....	63
Figure 2.13. Location of the two <i>Engina mendicaria</i> shell beads along the Individual E left humerus (the skull has been already removed at this point)	63
Figure 2.14. Detail of two small clusters of two pearls each (note the association of a big and a small pearl in both cases) close to the pelvis of Individual B	64
Figure 2.15. Detail of the chalcedony fusiform point found in the ribcage of Individual D.....	64
Figure 3.1. UAQ2 D3 cliff section showing 3.4 m of exposed dune sand with weakly developed Aridisols at 50–100 cm below the surface. A homogeneous, massive aeolian sand unit, which grade into finely bedded sands with bioclast inclusions below, underlies this	73
Figure 3.2. Physical properties of the UAQ2 D3 sequence	73
Figure 3.3. Geochemical properties of the UAQ2 D3 sequence. Note geochemical analysis was not conducted on the borehole extension to the exposed section	75
Figure 3.4. OSL sequence from UAQ36	75
Figure 3.5. A 9 m high quarry section exposed at UAQ2 in 2000. This shows the internal architecture of the dune with bounding surfaces showing several planation phases with clear erosional contacts between phases of dune development and accumulation	77
Figure 3.6. Sediment section through Sector 1+2 A5/B5. Base of photo shows level 17 at 2.5 m below the surface (Us30), which is the lowest occupation level. The section was extended into the underlying dune (Us31–38) to a depth of 3.0 m	77
Figure 3.7. Age depth diagram in BCE (left) for all calibrated (2 σ) radiocarbon samples and OSL ages and (right) for calibrated (2 σ) <i>Marcia</i> sp. shell samples and OSL ages from Sectors 1 and 2 A5B5	80
Figure 3.8. Physical properties of the UAQ2 Sector 1+2 A5/B5 sequence.....	80
Figure 3.9. Geochemical properties of the UAQ2 Sector 1+2 A5/B5 sequence.....	81
Figure 3.10. Sector 7 with Level 17 (=Us 30) exposed at the bottom of a small sounding with <i>Marcia</i> sp. and <i>Circe</i> sp. shells representing the earliest phase of occupation at UAQ2. The contact represents a bounding surface where the original dune has been truncated by aeolian erosion and deflation of the underlying red sand units, overlain by a later phase of aeolian deposition	85
Figure 3.11. Sediment profile for UAQ2 Sector 3 T23 showing stratigraphy and sample locations.....	86
Figure 3.12. Physical properties of the Sector 3 T23 profile.....	87
Figure 3.13. Geochemical properties of the Sector 3 T23 profile.....	87

Figure 3.14. Sediment sampling profiles and combined section drawing from Sector 5 U20/V19	89
Figure 3.15. Physical properties of the Sector 5 U20/V19 combined profile	89
Figure 3.16. Geochemical properties of the Sector 5 U20/V19 combined profile	90
Figure 4.1. Examples of Ubaid pottery sherds showing cracking at the coil's joint.....	99
Figure 4.2. Examples of Ubaid pottery sherds showing 'toothed' breaks	100
Figure 4.3. Examples of Ubaid pottery sherds showing various degrees of firing: 1. Pinkish-beige (low firing) e.g. UAQ2.2499; 2. Beige to greenish beige (medium firing) e.g. UAQ2.698; 3. Light greenish to medium greenish (high firing) e.g. UAQ2.1580.....	100
Figure 4.4. Types of pottery rims identified at UAQ2. Drawings: D. Zaros.....	102
Figure 4.5. Specimens of bowl sherd showing painted herringbone pattern	102
Figure 4.6. Specimens of Ubaid pottery sherd showing characteristic painted decorations. Drawings: H. David.....	104
Figure 4.7. Specimens of Ubaid pottery sherds with reserved lines and simple band decorations. Drawings: H. David.....	104
Figure 4.8. Specimens of Ubaid pottery sherds re-shaped and re-used as tools.....	105
Figure 4.9. Specimens of stone vessel rims	105
Figure 4.10. Main types of surface alteration observed on the lithic industry of UAQ2: 1. Whitish patina; 2. Aeolation; 3. Stigmata of thermal fracturing and rubefaction. Photos: C. Gallou	108
Figure 4.11. Illustration of the two surface states: 1. Water-rolled cortex; 2. Unrolled cortex. Photos: C. Gallou	112
Figure 4.12. Examples of lithic cores found at UAQ2. Photos & Drawings: G. Devilder.....	121
Figure 4.13. Type 1 endscrapers from UAQ2. Type 1a (UAQ2.558; UAQ2.109; UAQ2.1528; UAQ2.1529; UAQ2.116; UAQ2.118); Type 1b (UAQ2.1527; UAQ2.1071; UAQ2.1523). Note that UAQ2.1523 is made on a blade showing bladelet scars. Photos & Drawings: G. Devilder.....	123
Figure 4.14. Type 2 endscrapers from UAQ2. Type 2a (UAQ2.1824; UAQ2.448 ; UAQ2.557); Type 2b (UAQ2.634; UAQ2.1564). Photos & Drawings: G. Devilder.....	124
Figure 4.15. Type 1b points from UAQ2 (UAQ2.1526; UAQ2.1522; UAQ2.2503; UAQ2.2526; UAQ2.1530; UAQ2.556; UAQ2.1524; UAQ2.1531). Photos & Drawings: G. Devilder	125
Figure 4.16. Type 2b points from UAQ2 (UAQ2.1550; UAQ2.1324; UAQ2.963; UAQ2.2313; UAQ2.2312); Type 1a (UAQ2.1823); Type 2a (UAQ2.61; UAQ2.906); Type 3 (UAQ2.1072); Type 4 (UAQ2.2314; UAQ2.658). Photos & Drawings: G. Devilder.....	126
Figure 4.17. Type 3 point from UAQ2 (UAQ2.1223)	127
Figure 4.18. Examples of micro-borers present in the different levels of UAQ2: UAQ2.848. Micro-borer shaped by abrupt retouch (Level 5); UAQ2.2221. Double-ended micro-borer (Level 11); UAQ2.2344 & UAQ2.2214. Sub-lozenge-shaped micro-borers with abrupt retouch (respectively from Levels 11 and 8). Photos & Drawings: G. Devilder	127
Figure 4.19. Examples of splintered pieces present in the UAQ2 industry: UAQ2.1433. Bipolar splintered piece on flake (Level 5); UAQ2.845. Bipolar splintered piece (Level 8); UAQ2.481. Bipolar splintered piece (Level 12); UAQ2.211. Bipolar splintered piece on flake (Level 13); UAQ2.2176. Bipolar splintered piece (Level 11). Photos & Drawings: G. Devilder ...	129
Figure 4.20. Large sidescrapers - classified as 'tile knives' - and one specimen of shaped massive haematite from UAQ2, found by V. Charpentier during the 2009 survey on the surface of the site. Photos & Drawings: G. Devilder	131
Figure 4.21. Partially polished haematite adze UAQ2.770 and possible preform UAQ2.2305. Fully polished adzes include UAQ2.2586, UAQ2.2587, and UAQ2.2945. Photos & Drawings: G. Devilder & K. Lidour	132
Figure 4.22. Softstone files from Levels 11 and 12 (UAQ2.123 and UAQ2.427). Photos & Drawings: H. David	133
Figure 4.23. Selection of groundstone tools from UAQ2: grindstones (UAQ2.795, UAQ2.3013, and UAQ2.3015) and milling stones (UAQ2.783, UAQ2.784)	134
Figure 4.24. Selection of groundstone tools from UAQ2: abrading tools (UAQ2.3073, UAQ2.3074) and a crushing stone (UAQ2.817). Photos: H. David	134
Figure 4.25. Selection of stone fishing weights from UAQ2: Type 1 with transversal notches (UAQ2.541) and Type 2 with a transversal pecked waistline (UAQ2.1190, UAQ2.46, UAQ2.559). Photos & Drawings: G. Devilder	136
Figure 4.26. Shell fishhooks and preform from UAQ2. Photos & Drawings: H. David	138
Figure 4.27. Selection of shell tools from UAQ2: retouched <i>Callista erycina</i> valves (UAQ2.226, UAQ2.22) and a <i>Mimachlamys</i> sp. valve (UAQ2.788) showing a smooth recess on its ventral margin, likely due to its use as a tool. Photos & Drawings: H. David & G. Devilder	139
Figure 4.28. Selection of points from UAQ2 made from terrestrial mammal long bone shafts. Photos & Drawings: H. David	141
Figure 4.29. Perforated bone disc UAQ2.555, found in Level 8.....	141
Figure 4.30. Selection of stone adornments from UAQ2: pendants (UAQ2.381, UAQ2.60), disc/circular beads, and a possible preform for disc bead manufacturing (UAQ2.900)	143
Figure 4.31. Selection of stone adornments (tubular bead and various preforms) from UAQ2. Photos & Drawings: H. David.....	144
Figure 4.32. Massive haematite pendant (UAQ2.2451) and possible preform (UAQ2.2452) from UAQ2. Photos: H. David.....	144
Figure 4.33. Selection of marine shell adornments from UAQ2. Photos: H. David; Drawings: D. Zaros	145
Figure 4.34. Details of marine shell ornament manufacturing (by O. Brunet).....	147
Figure 4.35. Selection of marine shell adornments from UAQ2. Photos & Drawings: H. David	148
Figure 4.36. 'Chaîne opératoire' of the manufacture of <i>Spondylus spinosus</i> shell disc beads	151
Figure 4.37. Details of the spondyle disc bead manufacturing process (by O. Brunet).....	152
Figure 4.38. Selection of tusk shell (<i>Dentalium octangulatum</i>) beads from UAQ2. UAQ2.2674 and UAQ2.2438 are smoothed.....	153
Figure 4.39. Stone earrings from UAQ2: UAQ2.2450 (Level 14), UAQ2.979 (Level 7), UAQ2.2022, and UAQ2.2023 (Levels 4-5). Photos & Drawings: H. David	154
Figure 4.40. Stone spheres from Phase B at UAQ2 (Levels 13 to 10). Photos & Drawings: H. David	156
Figure 4.41. Selection of pearls from UAQ2; UAQ2.1663 was associated with Level 10 in Sector 1+2. Photos: K. Walton & H. David..	156
Figure 5.1. A. Sand and mud flats at mid-tide, below the mangrove (Khor al-Beidah, Emirate of Umm al-Quwain); B. Rocks on the coast of UAQ (Khor al-Beidah, Emirate of Umm al-Quwain); C. Sparse mangrove of <i>Avicennia marina</i> in UAQ (Khor al-Beidah, Emirate of Umm al-Quwain); D. A small shallow channel crossing through the UAQ mangrove. White mangrove (<i>Avicennia marina</i>) stands cover the banks (Khor al-Beidah, Emirate of Umm al-Quwain); Credits: K. Lidour	163

Figure 5.2. Recording zones utilised for diagnostic elements (Beech 2004: fig. 56 after Barrett 1995).....	165
Figure 5.3. Tiger shark (<i>Galeocerdo cuvier</i>) tooth (UAQ2.648) found at UAQ2, Level 10; Scale: 5 mm; Credits: M. J. Beech (photo) and K. Lidour (editing)	168
Figure 5.4. Sample of otoliths retrieved from UAQ2. Credits: L. Yeomans; Scale in mm	168
Figure 5.5. Examples of mammal remains showing anatomical connections due to concretions.....	177
Figure 5.6. Examples of caprine remains from UAQ2	177
Figure 5.7. Examples of remains belonging to cattle (<i>Bos taurus</i>) from UAQ2	178
Figure 5.8. Examples of <i>Canis</i> sp. remains from UAQ2.....	178
Figure 5.9. Examples of <i>Felis</i> sp. remains from UAQ2.....	178
Figure 5.10. Examples of leporid and rodent remains from UAQ2	179
Figure 5.11. Kill-off pattern for the UAQ2 caprines	179
Figure 5.12. Examples of remains belonging to juvenile caprines from UAQ2.....	180
Figure 5.13. LSI histograms for <i>Capra</i> and <i>Ovis</i> specimens at UAQ2	182
Figure 5.14. Live specimens photos of the main crab species identified at UAQ2. A. <i>Portunus segnis</i> in shallow subtidal waters (underwater photography) (Marawah Island, Emirate of Abu Dhabi); B. <i>Scylla serrata</i> on mud (<i>Terebralia palustris</i> nearby) in a mangrove forest (Khor Kalba, Emirate of Sharjah). Credits: A. K. Lidour, 2020; B. © J. Pereira, Creative Commons BY-NC, 2016	183
Figure 5.15. A. <i>Saccostrea cucullata</i> oysters on an intertidal rocky platform (Khor Kalba, Emirate of Sharjah); B. <i>Saccostrea cucullata</i> on a mangrove (<i>Avicennia marina</i>) trunk (Khor al-Beidah, Emirate of Umm al-Quwain); C. <i>Saccostrea cucullata</i> on mangrove (<i>Avicennia marina</i>) pneumatophores (Khor al-Beidah, Emirate of Umm al-Quwain); D. Intertidal flats covered with <i>Marcia</i> spp. and <i>Circenita callipyga</i> shells (Rams' lagoon, Emirate of Ra's al-Khaimah); E. Gathering of living clams (Rams' lagoon, Emirate of Ra's al-Khaimah); F. Living clams (<i>Marcia</i> spp. and <i>Circenita callipyga</i>) (Rams' lagoon, Emirate of Ra's al-Khaimah); Credits: K. Lidour, 2017	185
Figure 5.16. Marine bivalve, and scaphopod shells identified in the UAQ2 shell assemblage: 1. <i>Pinctada persica</i> ; 2. <i>Pinctada radiata</i> ; 3. <i>Mimachlamys sanguinea</i> ; 4. <i>Spondylus spinosus</i> ; 5. <i>Vasticardium lacunosum</i> ; 6. <i>Callista erycina</i> ; 7. <i>Callista umberella</i> ; 8. <i>Vepricardium coronatum</i> ; 9. <i>Circe rugifera</i> ; 10. <i>Marcia recens</i> ; 11. <i>Circenita callipyga</i> ; 12. <i>Anadara uropigimelana</i> ; 13. <i>Anadara ehrenbergii</i> ; 14. <i>Asaphis violascens</i> ; 15. <i>Saccostrea cucullata</i> ; 16. <i>Mactra aequisulcata</i> ; 17. <i>Isognomon nucleus</i> ; 18. <i>Brachidontes variabilis</i> ; 19. <i>Cardiolucina semperiana</i> ; 20-22. Undetermined bivalvia; 23. <i>Dentalium octangulatum</i> ; 24. <i>Dentalium tomlinii</i> . Credits: C. Dupont.....	186
Figure 5.17. Marine gastropod remains identified in the UAQ2 shell assemblage: 1. <i>Terebralia palustris</i> ; 2. <i>Hexaplex kuesterianus</i> ; 3. <i>Fusinus townsendi</i> ; 4. <i>Conomurex persicus</i> ; 5. <i>Trochus erithreus</i> ; 6. <i>Cerithium caeruleum</i> ; 7. <i>Neverita didyma</i> ; 8. <i>Turritella columnaris</i> ; 9. <i>Semiricinula konkanensis</i> ; 10. <i>Tylothais savignyi</i> ; 11. <i>Polinices mammilla</i> ; 12. <i>Bulla ampulla</i> ; 13. <i>Naria cf. lamarckii</i> ; 14. <i>Oliva bulbosa</i> ; 15. <i>Nassarius persicus</i> ; 16. <i>Lunella coronata</i> ; 17-18. <i>Priotrochus kotschyii</i> ; 19. <i>Nerita albicilla</i> ; 20. <i>Nassarius jactabundus</i> ; 21. <i>Littoraria cf. melanostoma</i> ; 22. <i>Planaxis sulcatus</i> ; 23. <i>Umbonium vestiarium</i> ; 24. <i>Ancilla farsiana</i> ; 25. <i>Ancilla castanea</i> ; 26. <i>Engina mendicaria</i> ; 27. <i>Mitrella blanda</i> ; 28. <i>Clypeomorus persica</i> ; 29. <i>Pirenella conica</i> ; Credits: C. Dupont.....	188
Figure 5.18. A-B. <i>Terebralia palustris</i> feeding on mangrove litter, Western Australia; C. Living <i>Lunella coronata</i> and <i>Priotrochus kotschyii</i> on intertidal rocks (Marawah Island, Emirate of Abu Dhabi); D. Looking for living <i>Hexaplex kuesterianus</i> on subtidal rocky flats in the vicinity of the Barracuda Resort (Khor al-Beidah, Emirate of Umm al-Quwain); E. Living <i>Hexaplex kuesterianus</i> covered with algae, found in shallow subtidal waters (underwater photography) (Khor al-Beidah, Emirate of Umm al-Quwain); F. Living <i>Hexaplex kuesterianus</i> on an intertidal rock (Marawah Island, Emirate of Abu Dhabi); Credits: A-B. © B. & M. Bell, Creative Commons BY-NC, 2014. C-F. K. Lidour, 2017-2019	189
Figure 5.19. Examples of non-edible mollusc species found at UAQ2. A. Aggregation of <i>Pirenella cf. conica</i> in the Wadi Dhaid mouth (Khor al-Beidah, Emirate of Umm al-Quwain); B. Cluster of <i>Planaxis sulcatus</i> on a white mangrove aerial root (Khor al-Beidah, Emirate of Umm al-Quwain); C. <i>Cerithium caeruleum</i> surrounded by smaller <i>Clypeomorus persica</i> in a shallow seagrass bed (underwater photography) (Marawah Island, Emirate of Abu Dhabi); D. <i>Cerithium scabridum</i> on an intertidal sand flat at lower shore (Marawah Island, Emirate of Abu Dhabi); E. <i>Clypeomorus persica</i> on an intertidal rock at lower shore (Marawah Island, Emirate of Abu Dhabi); F. Association of <i>Brachidontes variabilis</i> , <i>Isognomon nucleus</i> , barnacles and serpulid shells under an intertidal rock (Marawah Island, Emirate of Abu Dhabi); Credits: K. Lidour, 2017-2021	190
Figure 5.20. A. Aggregation of <i>Conomurex persicus</i> in large numbers along the beach of the Flamingo Resort at UAQ (Khor al-Beidah, Emirate of Umm al-Quwain); B. <i>Conomurex persicus</i> on subtidal sand (underwater photography) (Karpathos, Greece); Credits: A. K. Lidour, 2017. B. © R. Pillon, Creative Commons BY-NC, 2012.....	192
Figure 5.21. Distribution of marine mollusc taxa for the sample 29 (Level 9, Sector 1+2). CAD: C. Dupont	193
Figure 5.22. Size (length in mm) distribution of <i>Marcia recens</i> valves within sample 13. CAD: C. Dupont	195
Figure 5.23. Distribution of the types (A-G) of shell fragments of <i>Terebralia palustris</i> , encountered within samples 10 and 13. A. Complete shell; B. Siphonal canal; C. Columella fragment; D. Fragment of spire with columella; E. Apex; F. Fragment of spire with more than one suture; G. Fragment of spire with one suture. CAD: C. Dupont	196
Figure 5.24. Distribution of the types (A-J) of shell fragments of <i>Hexaplex kuesterianus</i> , encountered within sample 10. A. Almost complete shell (peristome broken); B. Peristome and apex absent; C. Columella with apex; D. Siphonal canal with columella; E. Siphonal canal without columella; F. Apex with columella; G. Apex without columella; H. Fragment of columella without apex; I. Shell fragment with whorl; J. Shell fragment without whorl. CAD: C. Dupont	197

List of Tables

Table 1.1. Thickness (range) of the UAQ2 levels.....	13
Table 1.2. Estimated volume of excavated sediment by levels	14
Table 2.1. Estimations of the age at death for the different individuals.....	66
Table 3.1. List of the number of samples collected for radiocarbon and OSL dating.....	71
Table 3.2. Sediment description UAQ2 D3 section and auger borehole.....	74
Table 3.3. Summary data of luminescence dating. *Note K, Th and U values for RAK/00/2 and RAK/00/5 were measured in situ using field gamma spectrometry and the values applied to determine the D value but were not made available to report here	74
Table 3.4. Radiocarbon dates from UAQ36 showing paired charcoal samples and <i>Marcia</i> sp. shells (collected in January 2018). Ages recalculated from Mery et al. (2019) using the Marine 20 calibration (Heaton et al. 2020).....	76
Table 3.5. Sediment description for Sector 1+2 A5/B5 profile. Rows highlighted in grey denote occupation layers and those in white aeolian sand-rich sterile or with limited evidence for occupation.....	78
Table 3.6. Radiocarbon ages from Sector 1+2 A5B5, Sector 5 and the 2005 samples collected from the open quarry face section for the corresponding archaeological levels across the site showing ^{14}C age and calibrated ages in BP and BCE (2σ)	83
Table 3.7. Sediment description for Sector 3 T23 profile indicating Units (Us) and Levels. Levels highlighted in grey represent occupation layers; rows in white relate sterile or low occupation levels	86
Table 3.8. Sediment description for Sector 5 V19/U20 profiles indicating Units (Us) and Levels. Levels highlighted in grey represent occupation layers; rows in white relate sterile or low occupation levels	90
Table 4.1. Ubaid phasing by Joan Oates (1960; 1969)	96
Table 4.2. Stratified Ubaid pottery at UAQ2, by level (551 fragments)	98
Table 4.3. Stratified Ubaid pottery at UAQ2, by phase (551 fragments)	98
Table 4.4. Other contexts of Ubaid pottery at UAQ2 (117 fragments).	98
Table 4.5. Types of painted motifs represented at UAQ2	103
Table 4.6. Raw material types identified among the lithic industry of UAQ2 (photos: C. Gallou).....	109
Table 4.7. Quantification of the lithic pieces by clastic raw material and phase.....	112
Table 4.8. Quantification of the lithic artefacts and debitage waste by phase	113
Table 4.9. Quantification of the lithic artefacts and debitage waste assigned to Stage I by level.....	114
Table 4.10. Quantification of the lithic artefacts and debitage waste of Stage II by level.....	118
Table 4.11. Quantification of the lithic artefacts and debitage waste of Stage III, by level.....	119
Table 4.12. Quantities of Neolithic ornaments per material found at UAQ2	142
Table 4.13. Sizes of stone earrings found at UAQ2	155
Table 4.14. Quantities of pierced pearls per Neolithic site in Eastern Arabia (adapted from Charpentier et al. 2012b, tab. 1; Salvatori 2007: 86, 148, 157; Uerpmann and Uerpmann 2003: 150-151; Beech et al. 2020: 7-8, fig. 9).....	157
Table 4.15. Proportions of stone and shell ornaments per Neolithic site (data after Brunet 2014: vol. 1 tab. 2, and vol. 2)	158
Table 4.16. Production techniques for shell beads	159
Table 4.17. Shell adornments per strata (n = 819 stratified beads)	160
Table 4.18. Ornaments per individual, Tombs 1 and 2	160
Table 5.1. Fish species quantification (in NISP) by sectors.....	166
Table 5.2. Fish species quantification (in NISP) by phases	167
Table 5.3. Fish families quantification (in NISP) by phases.....	168
Table 5.4. Fish families quantification (in %NISP) by phases	169
Table 5.5. Diameter of the fish vertebrae diameter (in NISP) by phases.....	169
Table 5.6. Fish size categories (in NISP) by phases	169
Table 5.7. Quantification in NISP (data sources: present study; Beech 2010; Uerpmann and Uerpmann 2018; von den Driesch and Manhart 2000; Desse 1988; Lidour and Beech 2019; Lidour and Beech 2020; Lidour et al. 2020a; Lidour et al. 2020b. Data editing: K. Lidour).....	170
Table 5.8. Quantification of anatomical elements (in NISP).....	171
Table 5.9. Fish species quantification (in NISP) by levels	172
Table 5.10. Table of abundance and main fishing techniques for the fish taxa identified at UAQ2 (data source: Department of Fisheries 1984)	173
Table 5.11. Quantification of terrestrial mammal remains from UAQ2.....	175
Table 5.12. Quantification of terrestrial mammal remains from UAQ2 by phases	176
Table 5.13. Quantification of the bird and reptile remains by phases.....	190
Table 5.14. Wet-sieving results: estimates of percentages of main shell species in Sector 1+2. Quantifications based on g/l (gram per litre) (original data: J. Martin; data formatting: K. Lidour)	191

Acknowledgements

We extend our warmest thanks to His Highness Sheikh Saud bin Rashid bin Ahmed Al Mualla, member of the Supreme Council of the UAE and ruler of the Emirate of Umm al-Quwain, as well as to His Excellency Sheikh Majid bin Saud bin Rashid Al Mualla, head of the Department of Tourism and Antiquities in Umm Al-Quwain, for their gracious invitation extended to the French Archaeological Mission to conduct research within Umm al-Quwain. Owing to their generous hospitality, the French Archaeological Mission in the United Arab Emirates, specifically the operational branch in Umm al-Quwain, has completed five excavation campaigns at the site known as Umm al-Quwain 2, in addition to various complementary study seasons. We are proud to share that these efforts have led to significant discoveries and advancements in the understanding of the region's history. We would also like to express our sincere appreciation to Ms Rania Kannouma, Head of the Department of Archaeology; Mr Meaqdad Aboelgreed, Archaeologist; Ms Nasreen Jamal, Executive Secretary; and Ms Mona Eisa, Honours Officer. Their contributions have been invaluable to the success of our archaeological endeavours.

The excavation and survey efforts received support from the Department of Tourism and Archaeology of the Emirate of Umm al-Quwain. Further backing was provided by the *Pôle SHS de l'Archéologie et du Patrimoine* and the Sub-directorate for Higher Education and Research, under the Directorate of Culture, Teaching, Research, and Network, which is part of the Directorate-General for Globalisation, Development and Partnerships at the French Ministry for Europe and Foreign Affairs in Paris, France. The National Research Agency (ANR) NeoArabia project has greatly contributed to our research over the last few years. Oxford Brookes University has also generously provided financial support.

We wish to convey our heartfelt gratitude to the Ambassador of the French Republic to the UAE, Mr Nicolas Niemtchinow, and Ms Stéphanie Salha, Counsellor for Cooperation and Cultural Action, for their steadfast support and ongoing commitment to our research. We also thank the French Institute in the UAE for their unwavering support. We sincerely thank Professor Alexandre Farnoux, who chairs the Foreign Excavation Commission, and Professor Pierre Tallet, who presides over the sub-committee for Africa and Arabia.

We are thankful for the support and help provided by all contributors. We also thank Mr Jacques Desplaces for his kind support and assistance. Further, we would like to thank Mr Christian Velde, Resident Archaeologist at the Department of Antiquities in Ras al-Khaimah, UAE, and Professor Derek Kennet, from the Oriental Institute at the University of Chicago, USA, for providing access to the wet sieving equipment in Julfar, Emirate of Ras al-Khaimah, UAE.

List of contributors

Apart from its director, Dr HDR (Habilitation à diriger des recherches) Sophie Méry, archaeologist, CNRS, UMR 7041 ArScAn, VEPMO, MSH Mondes, Nanterre, France, the UAQ2 field team was composed of archaeologists, bioarchaeologists, geoarchaeologists, topographers, and illustrators.

Excavation Team

Archaeologists

- Mr Gautier Basset – Burial Archaeologist, SRA Champagnes-Ardennes, France
- Mr Adrien Berthelot – Archaeologist, Agence France Museums, Paris, France
- Mr Federico Borgi – Archaeologist & GIS Specialist, Department of Tourism and Archaeology of Umm al-Quwain, UAE
- Dr Olivier Brunet – Archaeologist, National Park Service, Washington DC, USA
- Mr Vincent Charpentier – Archaeologist, INRAP Paris & UMR 7041 ArScAn, MSH Mondes, Nanterre, France
- Dr Michele Degli Esposti – Archaeologist, Division for the Archaeology of the Ancient Near East, Polish Academy of Sciences, Warsaw, Poland
- Ms Claire Gallou – Archaeologist, UMR 6566 CReAAH, Rennes, France
- Ms Dalia Gasparini – Archaeologist, UMR 6566 CReAAH, Rennes, France
- Ms Rania Hussein Kannouma – Archaeologist & Director of the UAQ Museums, Department of Tourism and Archaeology of Umm al-Quwain, UAE
- Dr Kevin Lidour – Archaeologist, Department of Culture and Tourism Abu Dhabi, UAE
- Ms Chloé Martin – Archaeologist, UMR 6566 CReAAH, Rennes, France
- Mr John Martin – Freelance Archaeologist
- Ms Armance Dupont-Delaleuf – Ceramologist & Freelance Archaeologist

Bioarchaeologists

- Ms Karyne Debue – Zooarchaeologist, CNRS, UMR 7209 AASPE, MNHN, Sorbonne Université, Paris, France
- Dr Catherine Dupont – Malacologist, CNRS, UMR 6566 CReAAH, Rennes, France
- Dr Marc Gosselin – Marine Biologist, UMR 6566 CReAAH, Rennes, France

Geoarchaeologists

- Dr Jean-François Berger – Geoarchaeologist, CNRS, UMR 5600 Environnement Ville et Société, Lyon, France
- Professor Dr Adrian Parker – Geoarchaeologist, Department of Social Sciences, Oxford Brookes University, UK
- Dr Gareth Preston – Geoarchaeologist, Department of Social Sciences, Oxford Brookes University, UK

Post-Excavation Team

Zooarchaeologists

- Dr Mark Beech – Zooarchaeologist, Department of Culture and Tourism Abu Dhabi & Natural History Museum Abu Dhabi, UAE
- Dr Marjan Mashkour – Zooarchaeologist, CNRS, UMR 7209 AASPE, MNHN, Sorbonne Université, Paris, France
- Dr Lisa Yeomans – Zooarchaeologist, Department of Cross-Cultural and Regional Studies, University of Copenhagen, Denmark

Geoarchaeologists

- Professor Dr Andrew Goudie – Geoarchaeologist, School of Geography and the Environment, University of Oxford, UK
- Professor Dr Frank Preusser – Geoarchaeologist, Institute of Earth and Environmental Sciences, Albert-Ludwigs-Universität Freiburg, Germany

Radiocarbon Dating Specialist

- Dr Susanne Lindauer – Radiocarbon Dating Specialist, Curt-Engelhorn-Zentrum Archäometrie gGmbH, Mannheim, Germany

Freelance Translators and Illustrators

- Ms Line Al Toki – Freelance French-English Translator
- Ms Hélène David-Cuny – Freelance Photographer & Illustrator
- Mr Gauthier Devilder – Lithic Illustrator, CNRS, UMR 5199 PACEA, Bordeaux, France
- Ms Laetitia Mundeteguy – Freelance Archaeologist & Illustrator
- Ms Daniela Zaros – Freelance Archaeologist & Illustrator

Preface

The recent excavations at UAQ2 (2011–2017), conducted by the French Archaeological Mission in the United Arab Emirates, represent a significant milestone in the study of the Neolithic period in Eastern Arabia. Nearly two decades after the initial investigations led by C. S. Phillips in the early 1990s, this renewed exploration has revealed the dual function of UAQ2 as both a residential and funerary site. The primary occupation of the site spans from the late 6th to the end of the 5th millennium BCE, with additional evidence suggesting later activity. A comprehensive series of radiocarbon (14C) and optically stimulated luminescence (OSL) dates has enabled the establishment of a precise chronology. These findings shed new light on the economy and material culture of the Arabian Neolithic, particularly in the northern UAE—a region that remains under-documented despite its archaeological richness. The data from UAQ2 provide valuable insights into the lifestyles, subsistence strategies, and cultural practices of Neolithic communities, presenting a detailed picture of dynamic and interconnected societies.

The discoveries at UAQ2 challenge several long-standing assumptions about Neolithic societies in the Arabian Peninsula. The site contains the oldest and most extensive graveyard of its kind in coastal UAE, offering evidence of intergroup violence and ritual practices associated with pearl mining. The material culture, including Ubaid pottery, pearls, and other ornaments, indicates that UAQ2 was integrated into broader exchange networks linking Eastern Arabia to Mesopotamia. Furthermore, the faunal remains from the settlement suggest a more complex economic system than previously understood, combining maritime resource exploitation, herding, and hunting. This points to reduced residential mobility and possibly a partially sedentary lifestyle. These findings necessitate a reassessment of the Neolithic in Eastern Arabia, highlighting the diversity and adaptability of its communities as they followed distinct micro-regional trajectories.

This monograph is structured into five chapters, each addressing a specific aspect of the site and its broader implications. The **Introduction** situates the UAQ2 excavations within their historical and scientific context, outlining the objectives of the project and the significance of revisiting the site after two decades. It also frames UAQ2 within the larger scope of Neolithic studies in Eastern Arabia, summarising the key research questions and methodologies employed.

Chapter 1 provides an overview of the site, detailing its geographical and environmental setting and the history of archaeological investigations, including the methods and strategies employed during recent excavations. **Chapter 2** focuses on the graveyard, analysing burial practices, associated grave goods, and the social and ritual behaviours inferred from the burials. **Chapter 3** examines the site's chronological framework, presenting the results of 14C and OSL dating alongside geoarchaeological studies that contextualise UAQ2 within the broader environmental and climatic changes of the Holocene. **Chapter 4** explores the material culture, including lithic industries, ornaments, and imported goods such as Ubaid pottery, situating these finds within local and regional economic and cultural networks. **Chapter 5** investigates subsistence strategies and the animal economy, with particular attention to the exploitation of marine and terrestrial resources, as well as evidence for herding and hunting practices.

The **Conclusion** synthesises the key findings of the UAQ2 excavations and their implications for understanding the Neolithic in Eastern Arabia. It underscores the importance of UAQ2 as a unique site bridging settlement and funerary practices, offering new perspectives on social organisation, economic strategies, and exchange networks in the region. The conclusion also identifies areas for future research, emphasising the need for continued interdisciplinary studies to further explore the complexities of the Arabian Neolithic in the UAE and beyond.

Through these chapters, this monograph aims to provide a comprehensive account of UAQ2 and its significance for understanding the Neolithic in Eastern Arabia. The findings presented not only deepen our knowledge of the region's past but also underscore the importance of continued research in UAQ and the northern UAE.

Introduction

S. Méry, K. Lidour

The Archaeology of the United Arab Emirates (UAE) remains relatively unknown today compared to the neighbouring great civilisations of Mesopotamia, Iran, and the Indus. The ancient past of the UAE is characterised by continuous human occupation since the Middle Palaeolithic, as recent excavations at the Jebel Faya rock shelter in the Emirate of Sharjah have revealed. At this same site, the stratified layers dated as early as 210 ka BP ultimately provide little information about the ancient lifestyles of their occupants, which are mainly documented by lithic tools.

The sites dating from the Arabian Neolithic period (c. 6500–3300 BCE) offer the oldest architectural structures as well as material cultures and zooarchaeological assemblages allowing for a detailed analysis of ancient human societies. This period is still poorly understood in the Arabian Gulf, particularly in the UAE. Prehistoric research has mainly focused in Saudi Arabia, the Sultanate of Oman and Yemen since the 1970s, with these regions seeing the first identification of substantial stratified Neolithic sites—notably the shell middens of Muscat and the Ja’alan in the Sultanate of Oman and those of the Tihama in southwest Yemen. This focus is also due in part to the continuation of major multi-year excavation and survey campaigns such as the Joint Hadd project, initially directed by S. Cleuziou (University of Paris 1 Pantheon-Sorbonne) and M. Tosi (University of Bologna). Nevertheless, the recent research is also greatly indebted to the excavations and detailed publications of the sites of as-Sabiyah H3 (2010) in Kuwait and Dosariyah (2018) in Saudi Arabia, within the framework of which this monograph is positioned. This momentum has, in fact, led to significantly greater attention being paid to the recent prehistory of the Arabian Gulf, which had been neglected for several decades.

In 1977, French archaeologists, led by S. Cleuziou, were invited for the first time by UAE authorities and under the patronage of HH Sheikh Zayed bin Sultan Al Nahyan (1st President of the UAE and former ruler of Abu Dhabi) to undertake excavations with local teams at Hili (Emirate of Abu Dhabi), at sites dating from the 3rd and the 1st millennia BCE – in particular, Hili 8, one of the significant key sites for the development of oasis agricultural-based societies during the Early Bronze Age. R. Boucharlat, after that, joined the team to investigate prominent Iron Age sites such as Rumeilah and Hili 14. At that time, the UAE represented almost virgin territory for archaeology, with the very first scientific research being initiated by the Danes at the end of the 1950s, which involved the excavation of Early Bronze Age sites in the Emirate of Abu Dhabi, such as Umm an-Nar (close to Abu Dhabi city) and the Jebel Hafit tombs (near Al Ain).

Since its inception, the UAE-France archaeological cooperation has been characterised by a desire for cultural and scientific openness – manifested by the UAE authorities within Museums and Departments of Antiquities of the emirates of Abu Dhabi (from 1977, in Al Ain, with S. Cleuziou, R. Boucharlat, S. Méry, and others), Sharjah (from 1986, with R. Boucharlat and M. Mouton), Umm al-Quwain (from 1987, with O. Lecomte, V. Charpentier, S. Méry, and K. Lidour), Ras al-Khaimah (from 1986, with C. Hardy-Guilbert), and Fujairah (from 2001, with A. Benoist and J. Charbonnier). Nearly 50 years of continuous collaborative research between the UAE and France has allowed archaeologists to shed light on the richness and diversity of the UAE’s historical heritage over more than 7,500 years – from the Neolithic to the present.

The first archaeological cooperation between the Emirate of Umm al-Quwain (UAE) and France lasted from 1987 to 1993, when O. Lecomte conducted excavations at ed-Dur (occupied during the first centuries CE) in the framework of a European collaborative project bringing together Belgian, British, Danish, and French teams (see, for example, Boucharlat *et al.* 1988; 1991a; 1991b). O. Lecomte also initiated excavations at the Neolithic site of Akab, located on the Al Ghallah island (Jousse 1999; Prieur & Guérin 1991; Jousse *et al.* 2002).

In 2002, the French Archaeological Mission in the UAE resumed archaeological research on the Neolithic Period in the Emirate of Umm al-Quwain. New excavations at Akab were conducted by V. Charpentier (for the settlement area, Charpentier and Méry 2008) and S. Méry (for the *Dugong Bone Mound*, see, for example, Méry *et al.* 2009). From 2009 onwards, a survey began that aimed to better understand the patterns of the coastal Neolithic occupation of the Emirate of Umm al-Quwain. In 2011, the excavation of Umm al-Quwain UAQ2, a site recovered and excavated in the early 1990s by C.S. Phillips (2002), was resumed by a joint UAQ-French team led by S. Méry. The excavations were conducted each year between 2011 and 2014, plus the last season that took place in 2017. Post-excavation study was done from 2011 to 2018 in the field. Two other sites were excavated in 2018 at a smaller scale, UAQ36 and UAQ38 (Méry *et al.* 2019; Degli Esposti *et al.* 2019).