



Ninth International Conference of the Dakhleh Oasis Project

**A retrospective
after 40 years dedicated
to Anthony J. Mills**

Monash University Centre

Prato, Italy

10th-13th June 2018



**MONASH
University**



Information for delegates

LOCATION	Sala Grollo, Monash University Centre in Prato, First Floor, Palazzo Vaj, Via Pugliesi 26, Prato. Tel: +39 0574 436921
REGISTRATION	Conference registration will be open from 4.00 – 4.30pm on Sunday 10 th June, Monash University Centre.
WELCOME	4.30 – 4.40pm – Colin A. Hope
OPENING ADDRESS	4.40 – 5.00pm – Maher Bashendi, Bir al-Shaghala
RECEPTION	5.00 – 7.00pm to be held on the terrace
SESSION TIMES	9.00am – 5.30pm 11 th -13 th June
CATERING	Registration includes a welcome reception, morning and afternoon coffee/teas and lunches.
INTERNET/COMPUTER	Monash Prato Centre has a computer lab with internet access and printing facilities available for all Centre guests from 9am – 5pm.



About the conference

A retrospective after 40 years dedicated to Anthony J. Mills

The Ninth International Conference of the Dakhleh Oasis Project marks the 40th year of investigations in the Dakhleh Oasis in Egypt's Western Desert (1978 - 2018). In recognition of this occasion the conference provides a forum for project members and colleagues to synthesise long-term research findings, reflect on current understandings of the oasis, and explore future directions for studying the oasis and its surroundings. The conference is dedicated to Anthony J. Mills, founder of the Dakhleh Oasis Project.

The conference is supported by the School of Philosophical, Historical and International Studies, the Centre for Ancient Cultures, Monash University, and the Egyptology Society of Victoria.



Day 2

Monday 11 June 2018

Session 1

Chair: Anthony Mills

9.00 - 9.20am

Maxine Kleindienst

Pleistocene Geoarchaeological Surveys, Kharga Oasis Prehistory Project, 2001-2011

9.20 - 9.40am

Mary McDonald

The Holocene Prehistory of Dakhleh and Kharga Oases: the Masara and Bashendi Cultural Units

9.40 - 10.00am

Paweł Polkowski

An overview of the study of rock art in Dakhleh Oasis. History of Research, rock art traditions, and interpretational issues

10.00 - 10.20am

Ashten Warfe

An overview of the Sheikh Muftah cultural unit: oasis/desert habitation during the 4th and 3rd millennia

10.20 - 11.00am

Questions; Tea/Coffee break

Session 2

Chair: Mary McDonald

11.00 - 11.20am

Paweł Polkowski

Rock Art Research in Central Dakhleh: paths of research and petroglyphs along the paths

11.20 - 11.40am

Clara Jeuthe

Camping at Balat – the Sheikh Muftah group

11.40 - 12.00pm

Sarah Ricketts

Sheikh Muftah and Old Kingdom Connections at Mut al-Kharab: Study of the Lithic Assemblage

12.00 - 12.20pm	Heiko Riemer and Mohammed Gamal The Darb al-Tawil Survey: exploring an old caravan track between Dakhleh Oasis and the Nile valley
12.20 - 12.40pm	Mohammed Gamal Cooperation between Egyptian Archaeologists and Foreign Missions in Darb al-Tawil Survey
12.40 - 2.00pm	Questions; Lunch
Session 3	Chair: Maxine Kleindienst
2.00 - 2.20pm	Caleb Hamilton (read by Gillian Bowen) Mapping Early Dynastic Activity in Dakhleh Oasis
2.20 - 2.40pm	Amy Pettman (read by Ashten Warfe) An Overview of Old Kingdom Egyptian Activity in the Western Desert
2.40 - 3.00pm	Laure Pantalacci IFAO Excavations at Balat: an overview
3.00 - 3.20pm	Amy Pettman (read by Anthony Mills) Ain al-Gazzareen: an overview of Old Kingdom Dakhleh's western administrative centre
3.20 - 4.00pm	Questions; Tea/Coffee break
Session 4	Chair: Laure Pantalacci
4.00 - 4.20pm	John Darnell (read by Colin Hope) The "Great Oasis" during the Middle Kingdom through Early New Kingdom in light of the Desert Roads Survey of the Theban Western Desert
4.20 - 4.40pm	Nikolaos Lazaridis Desert Deviations: interaction between ancient Egyptian scripts in rock graffiti from North Kharga
4.40 - 5.00pm	Colin Hope The New Kingdom remains at Mut al-Kharab
5.00 - 5.30pm	Questions/comments

Day 3

Tuesday 12 June 2018

Session 1

Chair: Olaf Kaper

9.00 - 9.20am

Richard Long

Egypt's Western Oases during the Third Intermediate Period

9.20 - 9.40am

Caroline Hubschmann

Dakhleh Oasis in the Late Period

9.40 - 10.00am

Colin Hope

The 'Ain Tirgi Cemetery

10.00 - 10.20am

Ali al-Batal

A Late Period Anthropoid Coffin from Bir Talata al-Arab al-Mawhoob Cemetery in Dakhleh

10.20 - 11.00am

Questions; Tea/Coffee break

Session 2

Chair: Françoise Dunand

11.00 - 11.20am

James Gill (read by Richard Long)

The Ptolemaic Dakhleh: an overview

11.20 - 11.40am

Günter Vittmann

Seth in Hieratic and Demotic sources from Dakhleh Oasis

11.40 - 12.00pm

Gaëlle Tallet

P. Deir 1: a view of al-Deir temple's accountancy

12.00 - 12.20pm

Sylvie Marchand

Céramiques d'époques perse et ptolémaïque du bassin sud de l'Oasis de Kharga (Fouilles IFAO et prospection 1994-2012)

12.20 - 12.40pm	Magdi Ibrahim Bir el-Shaghala Necropolis: an Architectural Overview
12.40 - 2.00pm	Questions; Lunch
Session 3	Chair: Gaëlle Tallet
2.00 - 2.20pm	Benjamin Bassett Early Roman Period in the Dakhleh Oasis: the ceramic evidence
2.20 - 2.40pm	Olaf Kaper Ancient Egyptian Religion in Dakhleh Oasis: a perspective after 40 years of DOP
2.40 - 3.00pm	Carlo Rindi Nuzzolo Past, Present, and Future of the Kellis Cartonnage: aspects of cultural heritage protection and preservation
3.00 - 3.20pm	Anthony Mills The Temple of 'Ain Birbiyeh
3.20 - 4.00pm	Questions; Tea/Coffee break
Session 4	Chair: Helen Whitehouse
4.00 - 4.20pm	Sabri Yousef The Rock-cut Tombs of Eastern Dakhleh
4.20 - 4.40pm	Ursula Thanheiser The Dakhleh Oasis: a micro-cosmos reflecting environmental and social changes
4.40 - 5.00pm	Rosanne Livingstone (read by Gillian Bowen) Household Textiles from Kellis
5.00 - 5.20pm	Fleur Letellier-Willemin Contribution of Textiles to the Study of al-Deir, Kharga Oasis
5.20 - 5.30pm	Questions/comments



Day 4

Wednesday 13 June 2018

Session 1

Chair: Iain Gardner

9.00 - 9.20am

Gillian Bowen

Christianity in Dakhleh Oasis: an archaeological overview

9.20 - 9.40am

Françoise Dunand

Changes in Funerary Structures at Kharga: from “traditional” to “Christian” tombs

9.40 - 10.00am

Kamel Bayoumi and Mahmoud Massod

‘Ain al-Sabil, Dakhleh Oasis

10.00 - 10.20am

Gillian Bowen

Dayr al-Malak revisited

10.20 - 11.00am

Questions; Tea/Coffee break

Session 2

Chair: Paul Kucera

11.00 - 11.20am

Tosha Dupras, Peter Sheldrick, Lana Williams and Sandra Wheeler

The Bones of the Ancestors: 40 Years of bioarchaeology in Dakhleh Oasis

11.20 - 11.40am

Peter Sheldrick

Trauma in Dakhleh oasis

11.40 - 12.00pm

Lana Williams, Matthieu Baudalet, Sandra Wheeler and Tosha Dupras

Aging is Elemental: defining biomarkers of disease using LA-ICP-MS on human hair

12.00 - 12.20pm

Sandra Wheeler, Lana Williams and Tosha Dupras

Entering the “Valley of Death”: mother-infant interactions and disruptions in nutrition

12.20 - 12.40pm	Questions/comments
12.40 - 2.00pm	Lunch
Session 3	Chair: Tosha Dupras
2.00 - 2.20pm	Fred Leemhuis The Qasr Dakhleh Project after Eighteen Years: results and implications
2.20 - 2.40pm	Colin Hope Distribution and Dating of Islamic Sites in Dakhleh Oasis
2.40 - 3.00pm	Paul Kucera Observations on some of the Ceramics from the 2013 field season at al-Qasr
3.00 - 3.20pm	Anetta Łyżwa-Piber (read by Paul Kucera) The mystery of Halima Uthman: a glimpse into her daily life
3.20 - 4.00pm	Questions; Tea/Coffee break
Session 4	Chair: Ashten Warfe
4.00 - 4.20pm	Seth in the Southern oasis - discussion
4.20 - 4.40pm	DOP Trustees Statement on objectives
4.40 - 5.00pm	Anthony Mills Concluding remarks



Abstracts

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Pleistocene Geoarchaeological Surveys, Kharga Oasis Prehistory Project, 2001-2011

Maxine R. Kleindienst, University of Toronto

Starting in 1987, Dakhleh Oasis Project (DOP) members, subsequently with the Kharga Oasis Prehistory Project (KOPP), conducted reconnaissance and then geological and geoarchaeological surveys in Kharga Oasis. After 2000, the KOPP concession included >10 km of the bounding Limestone Plateau (Sinn el-Kiddab) surface, the Escarpment face and the Pleistocene gravel-capped terraces below. KOPP prehistorians conducted reconnaissance in the 'Ain Amur and Umm Dabadib areas in northwestern Kharga. Along the long eastern edge of the oasis, they walked surveys in Gebel Yebsa, Refuf, Abu Sighawal, Bulaq, Matana, and Midauwara areas. Geological surveys also included the areas of Riziqat and Jebel Tafnis. Surveys are incomplete, but could not continue because fieldwork was not permitted after 2011. Pleistocene cultural stratigraphic units related to datings of tufas ($^{230}\text{Th}/^{234}\text{U}$) and of molluscs in pond and lake sediments (ESR) are summarized. Chronometric datings supply evidence for habitability in the region by demonstrating the presence of open water. The Kharga ESR sequence starts ca. 2 ma. Earlier Stone Age and Older and Younger Middle Stone Age aggregates indicate occupations from sometime >600 ka through MIS 5. The Terminal Middle Stone Age or Earlier Later Stone Age Khargan Complex is estimated to fall within MIS 4 to earlier MIS 2, but most likely falls within MIS 3, ca. 50 to 25 ka, when the desert has been postulated to have been uninhabitable. Little evidence for later MIS 2 occupations has been found.

The Holocene Prehistory of Dakhleh and Kharga Oases: the Masara and Bashendi Cultural Units

Mary M. A. McDonald, University of Calgary

The investigation of the Holocene Prehistory of Dakhleh Oasis was undertaken in 1978 by K. A. Bard, and from the 1979 season onward by M. McDonald, working with various members of the Dakhleh Oasis Project. Survey coverage of the oasis was far from even. While the 1979 season was spent revisiting sites recorded by Bard in the west end of the oasis, and the 1980 season in the Mut area, the focus since then has been on the eastern half of the oasis and beyond, starting in 1981 with the Ismant/Sheikh Muftah area. Three cultural units have been defined within the Dakhleh Holocene Prehistoric record, the Masara or Epipalaeolithic, the Bashendi, subdivided into A and B, and the Sheikh Muftah, which survived into Old Kingdom times. The first two units, the Masara and Bashendi, are discussed in this paper. Unlike Sheikh Muftah sites, most of which are found on the oasis floor close to modern cultivation, both Masara and Bashendi localities are largely confined to the oasis peripheries, particularly atop the Plateau to the north, and in and around the intensively explored Southeast Basin, well beyond the extant oasis. Both Masara and Bashendi groups experienced episodes of increased sedentism marked by the presence of stone slab structures, the Masara episode labelled Masara C, the Bashendi occurring in Late Bashendi A. In addition to the work in Dakhleh, McDonald, as a member of the Kharga Oasis Prehistoric Project, has since 2000 been surveying for Holocene Prehistoric sites on the Escarpment and the edge of the Libyan Plateau above Kharga Oasis. There, particularly in the Wadi el-Midauwara, are sites which closely resemble the Dakhleh Late Prehistoric sites, including the slab structure sites of both Masara C and Late Bashendi A. Remarkably, on the Kharga Oasis floor, being explored by prehistorians of the Institut français d'archéologie orientale, there are sites with the distinctive Masara C artifact assemblages but without structures, and no trace to date of Late Bashendi A either assemblages or structures. One of the tasks for the future will be to explain the evidence for increased sedentism in the early and mid-Holocene on the peripheries, but not in the centres, of the two oases.

An overview of the study of rock art in Dakhleh Oasis. History of research, rock art traditions, and interpretational issues

Paweł L. Polkowski, Poznań Archaeological Museum

In the first few seasons of the DOP survey, between 1978 and 1982, numerous places were discovered with petroglyphs similar to those published some 50 years earlier by Hans Winkler. It soon became clear that this highly specific heritage required focused research, and thus the Petroglyph Unit was established in 1985 by Lech Krzyżaniak. As a part of the DOP, the Petroglyph Unit has been conducting research since 1985, discovering more than 300 hundred rock art sites with thousands of individual petroglyphs. The more than 30 years of research, and a huge collection of documentation, can be now translated into a better understanding of rock art phenomena in the Western Desert of Egypt.

In this paper I discuss briefly the consecutive stages in the work of the Petroglyph Unit by presenting the areas of research, main findings, and interpretational themes raised across the years. The main categories or traditions in Dakhleh rock art will be described, and their relations to other archaeological contexts briefly discussed. Finally, some issues regarding conservation and protection of rock art sites shall be mentioned, as it has become one of the major problems in light of the security crisis in the recent years.

An overview of the Sheikh Muftah cultural unit: oasis/desert habitation during the 4th and 3rd millennia

Ashten Warfe, Monash University

The Sheikh Muftah cultural unit occupies the final phase in the prehistory sequence identified for Dakhleh Oasis. Emerging towards the end of the Holocene regionalisation period, the Sheikh Muftah operated at a time of critical environmental and cultural transition in northeast Africa. The increased aridity of the 4th millennium involved a reconfiguration of adaptive patterns and living practices within the oasis, and beyond: travel into the desert proper highlights the broader extent of Sheikh Muftah adaptability to a marginalised environment. In combination with these factors, emerging data for local interactions with the Nile Valley culture reveals a more complex impression of the Sheikh Muftah moving into the 3rd millennium.

This presentation takes the opportunity to synthesise research conducted by the Dakhleh Oasis Project, the Arid Climate, Adaptation and Cultural Innovation in Africa project, and the Institut Français d'Archéologie Orientale to offer a developing picture of oasis/desert habitation in the final stages of prehistory. In outlining the field of research, the talk will explore current perspectives on the Sheikh Muftah and conclude with some thoughts on future directions for study.

Rock Art Research in Central Dakhleh: paths of research and petroglyphs along the paths

Paweł L. Polkowski, Poznań Archaeological Museum

The Petroglyph Unit of the DOP has been investigating rock art for over 30 years on sites from various periods. Before 2003 this was mainly the eastern area of the oasis. However, since the initial fieldwork conducted in the central part of Dakhleh – a vast sandstone cuesta wedged between the huge cultivation basins of Mut and Balat – it has become clear that this area is rich in rock art. During the last decade, more than 260 rock art localities have been registered when surveying the so-called Painted Wadi and regions to the west.

In this paper I present and discuss selected aspects of rock art distribution in the central Dakhleh Oasis, especially of petroglyphs belonging to dynastic and later time horizons. A potential context of routes, paths and travel, in which rock art could have been produced and experienced in the past, will be briefly discussed. A distribution of particular motifs across the oasis will be presented in order to accentuate the value of rock art studies in overall archaeological research in Dakhleh. Finally, I will characterise the newly launched project of the Petroglyph Unit on “rock art and mobility” and the future research activities planned to be conducted in the central part of the oasis.

Camping at Balat – the Sheikh Muftah group

Clara Jeuthe, IFAO/DAI

The IFAO's work at Balat on the edge of Dakhleh Oasis/Western Desert now mainly focuses on the pharaonic sites such as the palace area 'Ayn Asil, founded in early Sixth Dynasty. However, less is known about the earlier occupation and the given conditions. Since 2013 a site of the indigenous Sheikh Muftah group has been investigated, dating to the Fourth Dynasty with an earlier occupation phase during the Early Dynastic period. With well-preserved stratigraphy, numerous features as well as finds, the site offers detailed information about the indigenous oasis population. The spatial analyses, the results of wear trace and phytolith analyses shed light on specific moments but also allow deep insight into the daily life culture at our camps. Moreover, the comparison of the material culture with the later Egyptian pharaonic finds at Balat allows us to consider questions of possible trans-cultural influence and long-living traditions.

The paper introduces the excavation results and our understanding of the Sheikh Muftah group, also highlights the differences and similarities between the indigenous and Egyptian pharaonic culture at Balat.

Sheikh Muftah and Old Kingdom Connections at Mut al-Kharab: Study of the Lithic Assemblage

Sarah Ricketts

This paper presents the recent conclusions from the technological study of the lithic assemblage from the site of Mut al-Kharab, in the south-central part of the Dakhleh Oasis. It explores the initial connections between the indigenous Sheikh Muftah and Old Kingdom Egyptians at the site, one which represents the earliest known in situ evidence of intermixed cultural material of the Sheikh Muftah and Old Kingdom Egyptians in the Western Desert. Through an understanding of these early interactions, wider implications of the early relations between the two groups can begin to be investigated in more depth.

A major aim of the current study was the exploration of manufacturing traditions, the expression of cultural identity, and the stylistic traits that may be used to help understand the nature of the settlement at the site, as well as the cultural behaviour of its inhabitants. Through a comparative analysis of the lithic assemblage from Mut al-Kharab with other sites in the Dakhleh Oasis, a comment on the degree of cultural entanglement within the stone artefacts is presented.

The Darb al-Tawil Survey: exploring an old caravan track between Dakhleh Oasis and the Nile valley

Heiko Riemer and Mohammed Gamal Saleh, University of Cologne

Among the caravan routes in the Western Desert of Egypt, the Darb al-Tawil (the “long road”) is the only direct connection between the Nile valley and the oasis of Dakhleh, and supposedly the main line of communication between the capital in Memphis and the oasis during the Old Kingdom. Caravan transport has continued for some 4000 years along this route providing a good case study for desert- road archaeology in general, and for understanding the historical and economic role Dakhleh Oasis has played during past times. The principal caravan track of this road runs from the city of Manfalut on the Nile some 250 km to the eastern centre of Dakhleh at Balat. In 2015 with the start of the construction of an asphalt road connecting Dakhleh directly with the Nile valley, the investigation of the Darb al-Tawil became an urgent rescue intervention. After a number of preparatory steps, a systematic field survey started in early 2018 from the Dakhleh terminus recording relevant data on tracks, ceramics and other objects, navigation cairns, animal bones, and places of repeated human activity, such as resting places.

Cooperation between Egyptian Archaeologists and Foreign Missions in Darb al-Tawil Survey

Mohammed Gamal Saleh

A number of long-term projects have been most influential in developing the archaeology of Dakhleh Oasis, such as DOP, ACACIA, or the IFAO missions, and as such have substantially contributed to Egyptian archaeology as a whole.

Now, and because of the security situation in the Western Desert our colleagues in the foreign missions working in Dakhleh have not been allowed to conduct archaeological surveys or excavations in recent years. Therefore, Cologne University has started a programme to work with Egyptian archaeologists to conduct field work. The first task was an archaeological survey in March 2018 along the Darb al-Tawil caravan road. The current cooperation between Cologne University and the Egyptian Ministry of Antiquities offers a number of solutions how work can be continued in the current political climate. This paper will explore the possibilities of such cooperation and will present suggestions on how cooperation can be intensified and enlarged.

Mapping Early Dynastic Activity in Dakhleh Oasis

Caleb R. Hamilton, Monash University

Evidence for Egyptian activity during the Early Dynastic period within the Western Desert, and specifically the Dakhleh Oasis region, is limited. This is in part due to limited excavations and recovery of material for this time period from this region, and also due to the nature and type of interaction undertaken. This paper attempts to map the distribution of the evidence for early Egyptian interest in Dakhleh Oasis and the surrounding region. Through mapping this evidence, it will show that there was a gradual spread of Egyptian interest prior to the likely settlement of this oasis during the early Old Kingdom. This allows a comment to be made on the distribution of this evidence across the desert landscape reflects a different of Egyptian interaction when compared to other regions during the Early Dynastic period.

An Overview of Old Kingdom Egyptian Activity in the Western Desert

Amy J. Pettman

An ever-increasing body of evidence indicates that there was substantial activity in the Western Desert by the Egyptians during the Old Kingdom, centred on Dakhleh Oasis, a phenomenon consistent with activity in other neighbouring regions. Early trade and exploratory forays in the Early Dynastic Period and the Third Dynasty were followed by the establishment of a permanent Egyptian occupation in Dakhleh Oasis. First confined to a few locations, by the Sixth Dynasty the Egyptian presence had expanded to encompass sites spread across much of the oasis, governed by a complex administrative system centred at 'Ayn Asil in the west and including settlements, cemeteries, centres of industry and a monitoring system at the oasis periphery.

This paper will present a brief overview of the establishment and development of, and changes evident in, the Egyptian occupation of Dakhleh throughout the Old Kingdom, and activity within the wider Western Desert.

IFAO Excavations at Balat: an overview.

Laure Pantalacci, Maison de l'Orient et de la Méditerranée, Lyon

Since the mid-1980s, excavations have been conducted by the IFAO on the site of Balat-ʿAyn Asil in the governors' residence. Dating from the end of the 3rd millennium (late Old Kingdom-early First Intermediate Period), the huge building includes living quarters, ka-chapels of several governors, administrative areas, storerooms and production units. When it was partly destroyed by arson in the early FIP, a lot of artefacts and archival material comprising clay sealings and tablets was burnt in situ. The tablets are inscribed with documentary texts in hieratic, a practice unparalleled in Egypt.

These circumstances are particularly favourable, given the small number of urban sites from the 3rd millennium and the lack of precise archaeological context for most of the oldest archives found in Egypt. Furthermore, the information from the governors' residence can be combined with data from the Northern Palace ("sondage nord") briefly investigated in the late 1970s, and from the necropolis, where four of the five huge mastabas of the governors were excavated. Lastly, the data from Balat can also be incorporated into a wider chronological and spatial frame, thanks to the work of several international teams in Dakhleh and around.

The presentation summarizes briefly the main results of the excavations and epigraphic study, and highlights some of the latest finds of both field and desk work.

Ain al-Gazzareen: an overview of Old Kingdom Dakhleh's western administrative centre

Amy J. Pettman

The site of Ain al-Gazzareen has been excavated under the direction of Anthony Mills since 1995. These excavations have revealed a large and complex site, enclosed by a substantial and possibly fortified perimeter wall, including a kitchen area and administrative/cult structure. The site's ceramic and lithic assemblages have been studied extensively. This paper will provide a synthesis of all previously published material from Ain al-Gazzareen, presenting an overview of its establishment sometime in the late Fourth Dynasty, through its various phases of development and its importance as a regional administrative centre for the western part of Dakhleh Oasis and possible use as a waystation for trade caravans.

The “Great Oasis” during the Middle Kingdom through Early New Kingdom in light of the Desert Roads Survey of the Theban Western Desert

John C. Darnell, Yale University

Capitalizing on the geomorphology of her location, the weakened central authority in the distant north, and the pugnacious atmosphere of her nomarchic neighbors, late First Intermediate Period Thebes rose from village to the muscular center of a unified and expansive state. The sinews of those imperial thews were the desert roads that linked the region of Thebes with the deserts to east and west, and points far beyond to the south. The roads of the Western Desert of the Thebaid reveal most clearly the mechanisms for the growth of Middle Kingdom Thebes, and the means by which she survived the upheavals of the Second Intermediate Period to become the even more magnificent center of a yet greater empire.

These road networks encompass primarily three major groups: 1) those leading to Kharga Oasis; 2) the tracks paralleling the Nile valley and heading essentially to the south; 3) a hub of routes in the area of the Sinn al-Kaddab Plateau, southwest of Aswan, linking together roads paralleling the Nile and others leading south out of Kharga Oasis. Archaeological and epigraphic remains on the routes indicate a concentration of earlier, more geographically-widespread roads onto a smaller number of vastly more heavily-traveled thoroughfares at the beginning of the Middle Kingdom, and the maintenance of at least the first group of these roads through the Second Intermediate Period into the early New Kingdom.

Archaeological sites along the Girga Road, the main road between the region of Thebes and Kharga Oasis, reveal a development of outposts sponsored by the central administration during the Middle Kingdom (the Abu Ziyar site), leading to the establishment of major centers in Kharga Oasis during the late Middle Kingdom (such as the Umm Mawagir site and northern satellite thereof east of the area of Hibis). These settlements appear to have produced surplus provisions, show evidence of small but constant association with Nubian populations at home in both the Nile valley and the oases, and continued to function through the Second Intermediate Period into the early New Kingdom. Together with the archaeological evidence from Dakhleh Oasis and road sites of the Theban Western Desert, the Kharga material reveals the Western Desert and the Great Oasis region to have been more than a no-man’s land during the Second Intermediate Period.

Desert Deviations: interaction between ancient Egyptian scripts in rock graffiti from North Kharga

Nikolaos Lazaridis, California State University Sacramento

Using the diverse corpus of epigraphic materials discovered and studied by the North Kharga Oasis Survey-Darb 'Ain Amur team, I select to discuss in this paper a sample of ancient Egyptian rock graffiti whose traveling carvers, feeling little to no pressure to follow spelling norms and grammatical rules, chose to record their fleeting presence by carving text that often deviated from their contemporary standard writing conventions. In the course of this discussion, special attention is paid to the connection these graffiti' complex script usage had to the carvers' educational background, as well as to the influence of North Kharga's environment over the conception and execution of these carvings. Among other things, I argue that the "written idiom" of these rocks in North Kharga was often a result of their carvers' bi-scriptural education and of the informal character of most of these graffiti, which allowed for frequent crossovers from the sphere of monumental writing to that of cursive writing, as well as for striking deviations from grammatical and decorum-related rules.

The New Kingdom Remains at Mut al-Kharab

Colin A. Hope, Monash University

Although New Kingdom material is encountered throughout Dakhleh and Kharga Oases, the quantity is small and it is only in Dakhleh that, as yet, sites have been found with evidence of substantial and long-lasting occupation. Foremost amongst these is Mut al-Kharab, the excavation of which since 2000 has yielded inscribed blocks of all phases of the New Kingdom that derive from one or more religious structures in which Amun and Seth, amongst others, were venerated. That these structures were at Mut is shown by the discovery of quantities of New Kingdom ceramics and other artefacts at the site. In addition, new evidence indicates the manufacture of cobalt blue pigment there also, a pigment used on decorated ceramics from Amenhotep II to Ramesses VI. This paper reviews the current state of knowledge on New Kingdom Mut and the little that is known from other sites in Dakhleh found by DOP.

Egypt's Western Oases during the Third Intermediate Period

Richard J. Long, Monash University

In recent years evidence of Third Intermediate Period activity at Mut al-Kharab has grown considerably. The discovery of both the Greater and Smaller Dakhleh Stelae in 1894, indicated the site housed a substantial Third Intermediate Period temple dedicated to the god Seth. This was further supported by a third stela, dedicated to a priest of Seth named Khai, found in 1928. Excavations by Monash University, under the direction of Colin Hope, have now been able to verify the activities outlined in these documents, unearthing a substantial corpus of material from the temple. This includes decorated blocks, in situ architectural remains, large numbers of ostraca, small finds and an increasing collection of ceramics. This evidence indicates Mut al-Kharab was probably one of the most significant Third Intermediate Period sites in the Western Desert.

Mut al-Kharab did not exist in isolation. Rather, this economic, social and religious hub would have been in constant contact with surrounding settlements, both within Dakhleh Oasis and throughout the Western Desert. This paper contextualises the Third Intermediate Period temple at Mut al-Kharab within the broader region, a task made possible by increasing fieldwork in the other oases. This allows for a re-evaluation of both the extent and nature of Third Intermediate Period activity in the western oases, including the interactions throughout the Western Desert, and the region's relationship with the populations of the Nile valley and Delta.

Dakhleh Oasis in the Late Period

Caroline Hubschmann, Federation University

There is a wealth of textual and archaeological material from Dakhleh Oasis dating to the Late Period. This presentation provides a summary and analysis of this evidence. The information has been gathered from archaeological and textual sources including excavation reports, ceramic analyses and published material. There was a proliferation of activity in Dakhleh Oasis during the Late Period, particularly in comparison to the preceding Third Intermediate Period. This is most readily observable in the evidence that dates to the Twenty-seventh Dynasty, which points to noteworthy population growth at this time. To a lesser extent, material dating to the Twenty-sixth Dynasty also shows that it was a time of significant activity. This was not restricted to Dakhleh Oases; the other oases of the Western Desert including Bahariya, Kharga and Siwa, also experienced contemporary activity. Thus, a regional overview of activity is provided for context, not only for Dakhleh Oasis and the Western Desert, but the Nile valley as well. This presentation demonstrates that the archaeology of the oases provides historical information that is relevant to Egypt as a whole and not just the desert region.

The 'Ain Tirghi Cemetery

Colin A. Hope, Monash University

During the 1980s and 1990s members of DOP undertook the excavation of some 58 tombs at the cemetery of 'Ain Tirghi located south of Balat. They were motivated by the wish to unearth a substantial body of data to enable a demographic profile of Dakhleh's population to be drawn from several different periods believed to cover the Second Intermediate Period to the Roman Period. Unfortunately, most of the tombs had been severely disturbed and the venture was abandoned. Despite this, the tombs yielded a significant collection of artefacts, especially coffins, which show it was in use until the Ptolemaic Period. No other cemetery known in Dakhleh to date was in use for such a long time span and, in addition, 'Ain Tirghi has yielded burials of the Third Intermediate Period so rare in the Western Desert. This talk presents an overview of the material.

A Late Period Anthropoid Coffin from Bir Talata al-Arab al-Mawhoob Cemetery in Dakhleh

Ali al-Batal

The excavations at Bir Talata al-Arab cemetery in Dakhleh Oasis were carried out in 1993-96 by the team of the Supreme Council of Antiquities led by Sayed Yamani. They yielded some interesting material from the Late Period and Ptolemaic Period now preserved in the Museum Storeroom. One of these is a decorated wooden anthropoid coffin. This paper aims at producing a complete record of this coffin and attempts its dating.

Ptolemaic Dakhleh: an overview

James C.R. Gill

This paper presents an overview of the current state of research into the Ptolemaic Period occupation of Dakhleh Oasis and summarises the available evidence. It proposes that the Ptolemaic rulers specifically targeted Dakhleh, together with the other oases, as areas for increased settlement and agricultural development, which laid the foundation for continued development during the Roman Period.

Seth in Hieratic and Demotic sources from Dakhleh Oasis

Günter Vittmann, Julius-Maximilians-Universität Würzburg

As is to be expected, Seth is frequently mentioned in the hieratic and demotic texts from Dakhleh. Not surprisingly, most of the evidence comes from the precinct of the temple of Seth at Mut al-Kharab, where the Australian mission under the direction of Colin Hope, from the beginning of this century onwards, has discovered hundreds of ostraca dating to the Third Intermediate Period and the latter half of the Ptolemaic Period. Far less frequent are references in the Roman Period fragments of demotic papyri from Kellis, in the ostraca of the Third Intermediate Period from Amhida and in other sites of the area. The paper explores the particular contexts in which Seth appears in these texts, e.g. as a recipient of offerings together with other gods, as an element in priestly and administrative titles or of personal names.

P. Deir 1: a view of al-Deir temple's accountancy

Gaëlle Tallet, University of Limoges

Excavations conducted at al-Deir have focused on the small temple dedicated to Amun that was built during the Ptolemaic period. A group of c. 40 demotic ostraca discovered in the building provided information on the way in which two religious institutions, the temple of Amun of Hibis and the temple of Amun of Pasy (al-Deir), managed the agricultural land of this micro-oasis. Unfortunately, the Greek papyri that were also found there were completely torn out by looters, but one of them could be partly reconstituted. It will be presented in my paper, and raises interesting questions in terms of land management in the oasis during the Ptolemaic period (second century BCE).

Céramiques d'époques perse et ptolémaïque du bassin sud de l'Oasis de Kharga (Fouilles IFAO et prospection 1994-2012)

Sylvie Marchand, IFAO

L'élaboration de la carte archéologique du bassin sud de l'oasis de Kharga, avec un catalogue de presque 300 sites, a été entreprise pendant plus d'une dizaine d'années par l'IFAO sous l'impulsion de notre regretté collègue Michel Wutmann (IFAO). Les sites archéologiques identifiés en prospection ont systématiquement fait l'objet d'une analyse du mobilier céramique. Cette opération d'envergure a été couplée dès le départ en 1994 avec la fouille de deux sites archéologiques majeurs: Ayn Manawir et Douch, Notre connaissance des céramiques locales de la région a largement bénéficié de ce programme.

L'occupation humaine ancienne de Kharga est attestée dès le 7^e millénaire et se poursuit à l'époque médiévale. Si la nature et la densité de la présence humaine dans le bassin sud de l'oasis de Kharga évoluent de façon fort différente d'une période chronologique à une autre, la période perse (27^e dynastie, 5^e s. av. J.-C.) marque clairement le début de la conquête de ce nouveau territoire sous les auspices des autorités politiques et administratives égyptiennes. On constate l'établissement de populations de façon pérenne avec des villages, des temples et des nécropoles. Ces installations massives profitent d'une politique agricole à grande échelle avec une mise en valeur du territoire et l'utilisation maximale des ressources en eau utilisant des techniques d'irrigations spécifiques (qânats).

La communication se concentre sur la céramique locale d'époque perse à la fin de la période dynastique. Cependant, il a semblé logique d'étendre notre contribution à l'époque ptolémaïque. En effet, la continuité formelle et technique des céramiques des derniers temps de l'époque pharaonique est encore très perceptible dans le corpus des céramiques datées du 3^e s. av. J.-C. Cette période ouvre également sur une période de rupture, tant pour le mobilier de fabrication locale que celui importé. Elle est perceptible dans l'apparition de récipients nouveaux qui appartiennent au vocabulaire formel et technique commun à toute l'Égypte et au monde méditerranéen de cette période, avec l'introduction des standards de la culture grecque.

Bier el-Shaghala Necropolis: an Architectural Overview

Magdi Ibrahim, SCA Dakhleh

The necropolis of Bir el-Shaghala revealed different architectural layouts and façades: many tombs show a common layout with open court, sometimes changed into a staircase with arcosolia and altars. The tombs have mostly an antechamber leading to one, two or sometimes three funerary rooms. The architectural façades of this group of tombs usually have an Egyptian cavetto cornice, decorated with funerary scenes which extend onto the door jambs as well. These tombs have a pyramidal superstructure following the New Kingdom private tombs in Egypt. These pyramids were preceded by a kind of funerary chapel that include two rooms with altars, among which are three examples located on a wide east west street.

A recently-excavated tomb shows such an Egyptian entrance with large cavetto cornice surmounted by a segmental pediment, which reflects the flavour of the mixed style of Alexandrian architecture. This type of pediment is frequently depicted on Alexandrian tombs and funerary stelae. The Bir el-Shaghala tomb is built in mud-brick reflecting Egyptian traditions in domestic architecture. Another new tomb in the necropolis shows a façade with engaged columns constructed in mud-bricks as well, but in purely Greek character. The circular stairs leading into the edifice reflect a Roman influence.

Early Roman Period in the Dakhleh Oasis: the ceramic evidence

Benjamin Bassett, Monash University

It has been hypothesised that the Roman period in the Dakhleh Oasis (approx. 30 BCE-350 CE) witnessed a tremendous demographic and economic efflorescence, marked by a significant increase in the number of archaeological sites throughout the oasis.

This model is largely reliant upon the accuracy of the dating of the ceramics from the sites, originally undertaken during the course of the DOP survey in the 1970s and 1980s, before any certain notion of ceramic periodisation for Roman Egypt in the region was possible. Furthermore, the 'Roman period' timescale encompasses around 350 years, and no attempt was made at subdivision. In this presentation I summarise my attempts toward establishing firmer dates for the pottery acquired during the course of the DOP survey. This is being undertaken by cross referencing diagnostic survey material with well-dated ceramic from the excavations at Kellis, and other more recent excavations at Roman sites in Egypt more widely. The presentation offers a preliminary insight into the results I have obtained in an effort to refine our understanding of Roman Period settlement patterns.

Ancient Egyptian Religion in Dakhleh Oasis: a perspective after 40 years of DOP

Olaf E. Kaper, Leiden University

Since the start of the DOP, the amount of new information that has been acquired about ancient Egyptian religion has increased dramatically. Seven stone temples are now known and 11 mud-brick temples, some with multiple phases of rebuilding over time. In addition, several decorated tombs provide detailed evidence of beliefs in the afterlife. Even though the religious beliefs expressed are exclusively Egyptian in origin, they bear witness to local traditions which may differ from those of the Nile valley, and they may show significant development over time.

In this paper, the temples and tombs of Dakhleh from the Ptolemaic period and especially the Roman period will be discussed, because they are the most numerous among the remains in the oasis. They have some unique features in their architecture, their decoration and in their cultic use. I aim to characterise the temples of Dakhleh as a group, and to set them in relation to each other, forming a cultic landscape, and in relation to the temples of Kharga Oasis. Finally, they will also be compared to the Egyptian temples of the Nile valley and the Roman world as a whole.

This will lead to questions and observations about local cultural identity, the historical development of Dakhleh, and the significance of Dakhleh for our understanding of Roman Egypt. My definition of Dakhleh Oasis as a distinct cultural unit within Roman Egypt gives rise to some specific research questions and recommendations for work in the future.

Past, Present, and Future of the Kellis Cartonnage: aspects of cultural heritage protection and preservation

Carlo Rindi Nuzzolo, Monash University

During the course of the 1990s, members of the Dakhleh Oasis Project excavated the north-western sector of the site of Ismant al-Kharab: this area has since been termed the Kellis 1 Cemetery. The rock-cut tombs discovered yielded, amongst mummified or skeletonised bodies and diverse funerary goods, a considerable amount of decorated cartonnage dating to the Graeco-Roman Period. The present paper will include, as an introduction, a general overview of the material, and brief typological and stylistic analysis. The discussion will then investigate a phenomenon of appearance of pieces akin to the Kellis ones on the art market, eventually reflecting on its ethical and practical consequences, as well as on the concepts of cultural heritage protection and preservation.

The Temple of 'Ain Birbiyeh

Anthony J. Mills, Dakhleh Oasis Project

In 1982 the Dakhleh Oasis Project encountered this site, which is a sandstone temple. It was built in later Ptolemaic times and decorated or dedicated by Augustus Caesar, probably around 10 BCE. The temple was found to be complete but in a poor condition. It was held together by the sand and earth that filled it to the roof and surrounded it. It has been excavated and recorded and has now been largely refilled. Most recently, we have begun to investigate the habitation site that surrounds it. This is probably the largest Roman period town in Dakhleh.

Rock-cut Tombs in Eastern Dakhleh

Sabri Youssef, SCA Dakhleh

Two years ago, I undertook an archaeological survey in two areas in eastern Dakhleh. The first was in the region between Bashendi and Halfat al-Bir, and the second between the western edge of Balat and Sheikh Muftah. I found a group of tombs, some of which were in bad condition. Some are carved into the flat ground and there is no clear evidence on the surface to indicate their presence. In my lecture I will shed light to some of these tombs.

The Dakhleh Oasis: a micro-cosmos reflecting environmental and social changes

Ursula Thanheiser, University of Vienna

During the Holocene, Northeast Africa witnessed an oscillation between arid and humid conditions. The general trend, however, was a shift towards aridity resulting in a change of vegetation consequently affecting the subsistence strategies of the local population. For the reconstruction of the environment, and the availability and utilisation of resources, two archaeobotanical methods were combined: analysis of wood charcoal and plant macro-remains.

For the first half of the Holocene, settlement patterns as well as archaeobotanical remains reflect the interplay of arid and humid conditions. While in Masara times subsistence strategies were based on collecting small seeded dicotyledons growing abundantly after (seasonal) rain, the emphasis in Bashendi times was on collecting wild cereals possibly boosted by decrue agriculture. Hardly any plant remains were recovered from Sheikh Muftah sites probably reflecting hyperarid conditions towards the end of the Neolithic period.

Egyptians, colonising the oasis towards the end of the Old Kingdom, introduced agriculture to the area and from then onwards the effects of aridification were compensated for by irrigation and the Dakhleh Oasis features all the cultivated plants known from the Nile valley.

By Roman times the oasis appears to have been densely populated, presumably triggered off by the employment of innovative water lifting devices and the advent of summer crops, both enhancing the carrying capacity of the land and probably leading to the production of surplus for trade. Settlements and cemeteries are found throughout the oasis with major administrative centres at Mut al-Kharab, Ismant al-Kharab, Amhida and 'Ain Birbiyeh. Trade routes connected Dakhleh to the other oases and to the Nile valley and facilitated the exchange of goods. Thus, luxury items found their way from the Nile valley and beyond to the oasis.

Household Textiles from Kellis

Rosanne Livingstone, Monash University

A large number of fragments of household textiles have been recovered from Kellis. These include fragments of curtain, bedding and floor coverings. The majority date to the fourth century CE and were recovered from domestic contexts. Most are easily distinguishable from fragments of garments because of the materials and techniques used in their manufacture. The techniques used include special weaves such as taqueté, the designs used for their decoration, and the use of polychrome colours.

Household textiles were manufactured at Kellis, as indicated by both documentary and material evidence. Contemporary texts from House 3 refer to a weaving workshop in the village, the ownership of looms, and the manufacture of blankets, cushions and other furnishing textiles. Numerous spindles, spindle whorls, some weaving combs and a few loom parts have been found, which could have been used in the manufacture of garments and soft furnishings. Locally-grown, undyed cotton was used for the ground weave and is a characteristic of household textiles found in the western oases where the environment was suitable for cotton cultivation. By comparison, the ground weave for those from elsewhere in Egypt was linen. The Kellis fragments show the type of household textiles being used in the village, which, although similar, often incorporated more simple designs than those recovered from larger sites, for example, the city of Antinoöpolis.

Contribution of Textiles to the Study of al-Deir, Kharga Oasis

Fleur Letellier-Willemin

Research on the textiles is part of the multidisciplinary studies of the French Mission, directed at first by Professor Françoise Dunand and now by Dr Gaele Tallet. Textiles are studied in the field, as archaeological objects, along with all the other artefacts. The site was occupied during a complex period from the sixth century BCE to sixth century CE, according to the recent discoveries. Large quantities of textiles, with specific characteristics, were discovered inside the six cemeteries, the workshop of the embalmers, the temple and the Roman fortress. I will examine the place of flax, cotton and wool among these textiles.

The single site allows us to follow the evolution of the textiles, as regards fibers, techniques and patterns. This provides a marker of the interaction of the institutions with daily life. It contributes to the understanding of a very important economic factor in the oasis, water, with the three fibers found on the site. It reflects the specific place of tradition and of novelties within the evolution. Can we appreciate the degree of their use and attest any foreign influence? These textiles raise many questions but provide few answers, and they indicate the direction of future research through the comparison with the textiles of Dakhleh.

Christianity in Dakhleh Oasis: an archaeological overview

Gillian E. Bowen, Monash University

The survey and subsequent excavations undertaken in Dakhleh Oasis over the past 40 years have revolutionised our knowledge of Christian expansion into the oases. The pace of conversion amongst the Egyptians was hotly debated well into the late 1990s with one faction arguing for a gradual adoption of the new religion and opponents claiming that by the end of the 4th century 80% of the population was Christianised. The DOP survey identified numerous sites which it designated “Christian” based on ceramics, burial patterns and architecture. Excavations at Ismant al-Kharab have identified a Christian presence from the late 3rd century, while evidence from other settlement sites, which include ‘Ain al-Sebil, ‘Ain Gedida, Mut al-Kharab, Dayr Abu Matta and Amhida, have confirmed that by the mid – late 4th century, the Dakhleh population was Christianised. This paper considers the contribution made by each of the sites towards our understanding of the practices of these early Christians both in Dakhleh and, by extension, Upper Egypt.

Changes in Funerary Structures at Kharga: from “traditional” to “Christian” tombs

Françoise Dunand, University of Strassburg

Upon two sites in Kharga, Douch in the south and al-Deir in the north, where large cemeteries were in use between the IVth century BCE and the IVth century CE, new cemeteries were laid out during the IVth century CE. In the traditional cemeteries there were mostly collective tombs, originally for the use of families, very often reused, sometimes converted to charnel-houses. Inside the new ones, tombs were individual pit-graves.

However, in the new cemetery (west cemetery) at al-Deir, some collective tombs were preserved, even if the cemetery was mainly composed of individual pit-graves. The first question this raises: is it possible to find an explanation for this new practice? At the same time, it seemed relevant to preserve a kind of relation after death between the members of a family: individual pit-graves gathered in the same enclosure at Douch and adjacent pit-graves at al-Deir.

Another question: in the small cemetery at Douch and in the northern part of the cemetery at al-Deir, orientation of tombs was west/east, while bodies face east. We could compare this with the cemetery Kellis 2 (and many others) where the practice was the same. But in the south part of this cemetery at al-Deir, the main orientation was north/south, with bodies facing south. Until now, we have not found any explanation for that change...

'Ain al-Sabil, Dakhleh Oasis

Kamel A. Bayoumi and Mahmoud M. Massod, SCA Dakhleh Oasis

The site of 'Ayn Sabil is located 10 km. south-east of Mut and one km. west of Kellis; it covers an area of approximately 4.5 acres and was excavated from 2009-2011. It contains mud-brick structures, including houses, pigeon lofts and a church, some preserved to roof level. It may have been laid out on an orthogonal plan with enclosing walls. Numerous finds, including a hoard of coins, ostraka and domestic utensils indicate a date in the fourth century and possibly later, and parallel finds at Kellis. This paper will present an overview of the site.

Dayr al-Malak Revisited

Gillian E. Bowen, Monash University

At the Krakow conference I presented a paper on the survey of the church of Dayr al-Malak and considered a tentative date for its foundation. In the intervening years, further studies, especially by Colin Hope on the ceramic assemblage, have led to a reappraisal of that date, which we now assign to the 10th century. The church, a nine-domed, mud-brick structure, was surveyed by the DOP in 1979 and a selection of surface sherds as well as those from the test excavation was gathered; Mills made no estimate of its possible date. Since 1981, the church has featured in several publications on ecclesiastical architecture and has been variously dated by those authors to the 8th, 16th and the 17th centuries without providing any convincing evidence. This paper considers the evidence for the date and the implication this has for the survival of Christianity in Dakhleh following the Arab conquest.

The Bones of the Ancestors: 40 Years of bioarchaeology in Dakhleh Oasis

Tosha Dupras, Peter Sheldrick, Lana Williams and Sandra Wheeler, University of Central Florida

The study of human remains in conjunction with their archaeological context has been a long time purview of the physical anthropologists (known as the “Bone Team”) of the Dakhleh Oasis Project. Human remains associated with archaeological sites were first documented during the original surveys in 1978-79. In the early 1980s the first physical anthropologist was invited to join the DOP, and formal study and analysis of human remains associated with archaeological excavations began in earnest. Since this time bioarchaeological analyses have been conducted on remains from several sites including ‘Ain Tirghi, Kellis, Dayr Abu Matta, Amhida, and Neolithic burial sites. These analyses have revealed how humans adapted to the changing and challenging environment of the oasis. Here we examine what we have learned about human lives and deaths in the oasis – from demography, life expectancy, occupational hardships, morbidity and mortality, diet, and mobility. We will also consider burial contexts as a way to examine changing religious, political and social ideology in the Dakhleh Oasis. Bioarchaeological research has revealed the incredible resiliency and adaptability of the humans that lived in the Dakhleh Oasis.

Trauma in Dakhleh Oasis

Peter Sheldrick, SSEA

Bioarchaeology has provided much information about the ancient people of the Dakhleh Oasis, including their physical appearance, their diet and their lifestyle. One aspect of their lives that can be gleaned from the human remains is trauma. Most of these specimens illustrate the effects of accidents on bones in the form of fractures both healed and unhealed. The locations of these lesions suggest the types of activities that lead to the accidents. There are also examples of “malintent” trauma; that is, the result of deliberate interpersonal violence. Some of the more interesting examples will be shown.

Aging is Elemental: defining biomarkers of disease using LA-ICP-MS on human hair

Lana Williams, Matthieu Baudelet, Sandra Wheeler, Tosha Dupras, University of Central Florida and National Center for Forensic Science, Chemistry, Orlando Florida.

Growing older is a process constituting profound biological changes, and research examining the experiences of the elderly has been especially limited in bioarchaeology. Application of elemental analysis of essential elements and toxic metals in hair is becoming increasingly popular in medical studies to assess evidence of early-stage existing disease processes in elderly populations. Analysis of preserved hair of women 55+ years of age recovered from the Kellis 2 cemetery provides a unique perspective on the processes of aging and the health experiences of this segment of society. Laser ablation–inductively coupled-mass spectrometry (LA-ICP-MS) was used to evaluate the concentration levels of essential elements (calcium, magnesium, zinc, copper, iron, manganese) and toxic metals (lead, cadmium, cobalt, and mercury, arsenic, vanadium). Results indicate significant group clusters that may suggest high risk for hormone-dependent cancers and impaired glucose metabolism within this segment of the community. This study indicates that hair element analysis is useful in screening tests for the biomarkers of various diseases in archaeological populations as well as modern clinical settings.

Entering the “Valley of Death”: mother-infant interactions and disruptions in nutrition

Sandra Wheeler, Lana Williams, Tosha Dupras, University of Central Florida

Breast-fed, infants living in communities with adequate food access go through a period of particularly high health risks during the time of complementary feeding between the ages of 6 and 36 months. The most vulnerable of these children die during this period, which has been characterized in epidemiological studies as the “valley of death” and represents both a biological and cultural reality. The majority of those who survive these health insults are the “vulnerable survivors.” The Kellis 2 cemetery provides a unique opportunity to analyze the effects of the biological and cultural disruptions occurring within the mother-infant nexus during this critical period of physiological adjustment. Maternal, fetal, and infant (N=210) $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ profiles were produced from hair, dentin collagen, and bone collagen to evaluate adverse biological factors simultaneously present during weaning and illness. Our results indicate that, within this “valley of death” at Kellis, there are three situations in which feeding practices and health interact within the mother-infant nexus. The first situation is related to the mother’s ability to meet the nutritional demands of their infants during prolonged breastfeeding. The second situation that occurs is undernutrition as a result of exposure to a health insult, such as infection or gastrointestinal distress, at a time when the child is losing passive immunity received from the mother. The third situation is children being weaned on foods without adequate protein quality and content at a time when the child may already be undernourished. The data from this study suggest that the risks of malnutrition may start shortly after birth, and that the vulnerable survivors who escape the “valley of death” at such a young age may be even more susceptible and predisposed to environmental stressors than previously considered.

The Qasr Dakhleh Project after Eighteen Years: results and implications

Fred Leemhuis, University of Groningen

The QDP was originally created in 2002 as part of the DOP to begin the restoration of the unique, old mud-brick houses of al-Qasr. However, soon two discoveries made the QDP a multi-focal enterprise. The rubble of the collapsed house neighbouring the house under restoration had to be cleared. From 2003 onward it yielded, among other things, more than 600 paper documents from the 18th, 19th and the early 20th centuries. In 2006 sections of a Roman wall were discovered. It soon became clear that these were remnants of the wall of a castrum that presumably was the beginning of present day al-Qasr. It is mentioned not only in contemporary Greek papyri and ostraka, but also in the works of mediaeval Arab geographers like Ibn Hauqal, Abu ‘Ubayd al-Bakri and Ibn Duqmaq. The probable implications of these and later discoveries and findings for the history of al-Qasr will be sketched.

Distribution and Dating of Islamic Sites in Dakhleh Oasis

Colin A. Hope, Monash University

Throughout the course of the survey of Dakhleh Oasis and subsequent excavation projects some 60 localities have been identified as witnessing activity during the Islamic Period, regularly on the basis of the discovery of ceramics. Collections from the majority of these locations are small in quantity and their discovery does not indicate that each of the find spots witnessed habitation or other consistent human activity, nor do they indicate the length of any such activity at a specific location as most derive from the surface. Twenty-six of the localities provide evidence of architecture and so can be identified as actual sites, including field systems. Amongst the sites are four with kilns, certainly used in the manufacture of unglazed pottery, and three major centres: Qasr al-Dakhleh in the west, Mut al-Kharab in the centre and al-Qasaba in the east. The site of al-Qalamun should probably be added to the number of such centres but its early phases are inaccessible. The distribution of the Islamic sites mirrors that of their predecessors and contemporary settlement patterns; the majority appear to have been quite small while both Qasr al-Dakhleh and Mut al-Kharab were occupied extensively before the arrival of Islam.

The Islamic pottery was briefly examined by Donald Whitcomb and then Edward Keall in 1980, who focused upon the glazed wares. All of the material, except some from the current excavations at Mut al-Kharab, has been recorded by the Monash University team, while that from the excavations at Qasr al-Dakhleh is studied by Anetta Łyżwa-Piber. As certain pieces amongst the glazed material from two sites in particular attracted Keall's attention, this presentation will summarise his findings as they have served as a guide to the current study of the all of the material.

Observations on some of the Ceramics from the 2013 field season at al-Qasr

Paul Kucera, University of Central Florida

To date there has been a relatively clear distinction between ceramics of the Late Roman period and those of a known later, so-called 'Islamic', manufacture and tradition which are found at the site of al-Qasr. Within the ceramic material from the excavation of Trench 8 in 2013 by the Qasr Dakhleh Project, many pieces of a different and varied nature have been identified that, according to our current knowledge, do not readily situate in the established periods and well-known cultural phases. Some pieces also appear to be imported, but from a yet undetermined location. Their dating is not certain; however, some of the traits permit us to evaluate possible influences and likely connections with known ceramic traditions. This paper presents a preliminary examination of key diagnostic ceramics from Trench 8, with a focus upon some of the more unusual pieces. The study raises many new research questions for al-Qasr, which will also be reflected upon in the presentation, and sheds new light on the occupation of the settlement.

The mystery of Halima Uthman: a glimpse into her daily life

Anetta Łyżwa-Piber, Qasr Dakhleh Project

This paper will shed light on Halima Uthman's daily life – the divorced lady who lived in the Bayt al-Qurashi at the turn of the 19th and the 20th century in al-Qasr. Based on the information from the personal letters sent to her by her son Hassan but also according to the fact that she had a right to wear her own khātim, the signet used to seal the documents, it can be stated that she had a relatively independent position as a woman, which constitutes a unique and interesting case. Furthermore, her independent status and autonomy is underlined also by the fact that she lived in her own small apartment located in the front part of this house, where these letters and signet were found. This part of the house has a public character and is considered as a male zone. It seems that the room below her apartment which was used as a storeroom might have belonged also to her. In so-called Halima's room and the storeroom many daily life objects have been found, like pottery vessels, baskets, clothes, shoes and typically female possessions like cosmetics and utensils used for sewing, also amulets. They provide a glimpse into the daily life activities, habits and customs in this period and Halima's special place in this pre-modern, rather isolated Muslim society.



Dakhleh Oasis Project Conference

Past venues

Durham 1994
Toronto 1997
Melbourne 2000
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