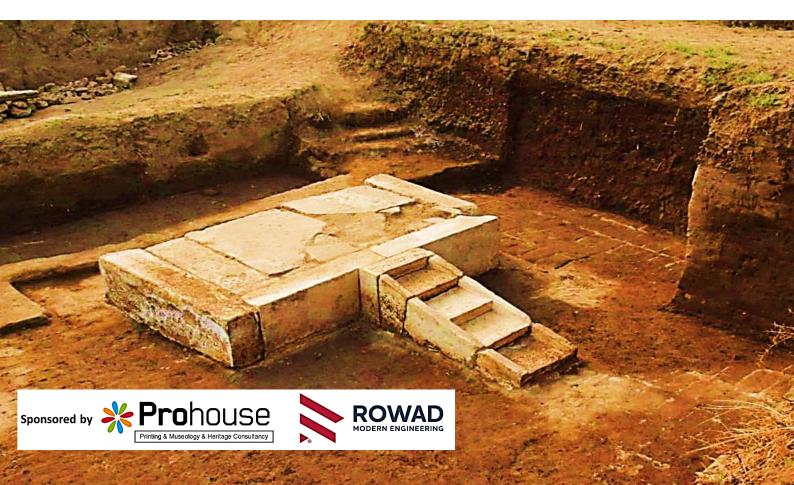


THE EIGHTH DELTA SURVEY CONFERENCE AND WORKSHOP 18th-20th MARCH 2023 Ain Shams University, Cairo, Egypt

Organized as part of the Delta Survey Project of the British Academy/Egypt Exploration Society in Collaboration with the Ministry of Tourism and Antiquities, Egypt and the University of Ain Shams







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Welcome to the Eighth Delta Survey Conference!

Following the worldwide Covid-19 pandemic and successful online workshop and conference in 2021, the Delta Survey Conference returns to Egypt for our biannual presentation of archaeological work in the field and in research in 2023. The Eighth Delta Survey Conference brings together the work of colleagues in order to continue our goal of sharing information, meeting each other and joining together as colleagues. We hope that you all enjoy our conference and meet one another during the packed program.

We thank the University of Ain Shams in collaboration with the Ministry of Tourism and Antiquities for cooperation with the Egypt Exploration Society and British Academy to organize and support the conference.

We look forward to a busy conference, with the results of fieldwork from old, new and ongoing excavations and research.

With best wishes from the organizing committee

Mamdouh Eldamaty, Penny Wilson, Ayman Wahby, Essam Nagy, Hossam Tantawi, Ahmad Al-Shoky, Sawsan Eissa, Mennat-Allah El Dorry, and Rasha El-Mofatch.



Program

First Day, Saturday 18 th March 2023			
Registration (08.30	- 09:00)		
Ain Shams University, Face	ulty of Pharmacy		
Grand conferen	ce hall		
Opening Session			
SURVEY Conference Opening Speeches			
(09:00 – 09:20)	(09:00 – 09:20)		
- Prof. Dr. Mamdouh Eldamaty, Former Minister of Tourism and Antiquities, and Head of Ain Shams			
University Excavations at Arab Al-Hisn.			
- Prof. Dr. Hossam Tantawi, Dean of the Faculty of Arche	ology.		
- Prof. Dr. Penny Wilson, Director of Delta Survey Project, the Egypt Exploration Society, Durham University.			
- Dr. Aiman Ashmawy, Minister of Tourism & Antiquities Representative.			
- Prof. Dr. Ayman Saleh, Vice-President for Post Graduate	- Prof. Dr. Ayman Saleh, Vice-President for Post Graduate Affairs & Research, Ain Shams University.		
- Prof. Dr. Mahmoud El-Meteini, Conference-Chair & President of Ain Shams University.			
keynote Speech			
(09:20 – 10:00)			
Prof. Dr. Dietrich Raue			
Director of German Archaeological Institute Cairo (DAI)	Heliopolis		
L	·		

Sponsors (10:00 – 10:20)

	1 st Session: EASTERN DELTA		
Chairman:	Prof. Dr. Ali A	bedelhalim	
	Professor of Egyptology, Director of the Egyptian Museum Cairo		
Time	Name of Speaker(s)	Title of Paper	
10.20 - 10.30	Mamdouh Eldamaty	Excavations of Ain Shams University at Arab Al-	
	Ain Shams University	Hisn- autumn season 2022	
10.30 - 10.50	Aiman Ashmawy Ali	The tomb of Ken Amun at Tell el-Maskhuta;	
	Supreme Council of Antiquities	rediscovery and short study	
10.50 - 11.10	Henning Franzmeier		
	Bologna University A Palace at Pi-Ramesses		
11.10 - 11.20	20 Questions		
11.20 – 11.50 Coffee Break			
2 nd Session: EASTERN DELTA			
Chairman:	Chairman: Prof. Dr. Penny Wilson		
	Director of Delta Survey Project, the Egypt Exploration Society, Durham University		
11.50 - 12.10	Manfred Bietak	How Permeable was the eastern Frontier for	
	Austrian Academy	people in the Old Kingdom?	
	(Zoom)		
12.10 - 12.30	Jay Silverstein	A Lost Temple of Psammuthis found at Tell	
	Nottingham Trent University	Timai, Egypt	
	(Zoom)		
12.30 - 12.50	Eva Lange-Athinodorou	Bubastis as a case study for the emergence of	
	Uni Würzburg	early urban centres in the Nile Delta	
12.50 - 13.10	Jozef Hudec & Květa Smoláriková	What was the first New Kingdom's fortress at	
	Slovak Academy of Sciences	Tell el-Retaba?	
13.10 - 13.30	Anna Wodzinska	Pottery from Third Intermediate Period Houses	
	PCMA/Warsaw University	at Tell el-Retaba	
13.30 - 13.40	Questions		
13.40 - 14.40	Lunch Break		

3 rd Session: EASTERN DELTA		
Faculty of Pharmacy		
Chairman:	Dr. Aiman Ashmawy Ali	
	Head of the Egyptian Antiquities Sector at the Supreme Council of Antiquities	
14.40 - 15.00	Kotb Fawzy	Tell El Deir Excavation Season 2022-2023
	Ministry of tourism and antiquities	
15.00 - 15.20	Elsayed Abd El-Alim	Vineyards and wine industry in Tell Heboua
	Ain Shams University	(Tharw) during the New Kingdom. Textual and
		archaeological sources
15.20 - 15.40	Amr abdel Raouf	Determination of Buried Archaeological
	Zagazig University	Structures by Archeo-geophysical Methods (Tell
		Tebilla, Egypt)
15.40 - 16.00	Sherif Abdel Monaem	Trade and economy in Tell Tebilla
	Ain Shams University	
16.00 - 16.20	Abdelrahman Medhat	Application of the Raman Spectroscopy on
	Egyptian Museum	Experimental Samples in the Study of Ancient
		Perfumes
16.20 - 16.30	Quest	ions

Second Day, Sunday 19th March 2023 Registration (08.30 - 09:00)

ELTA SURVEY

Faculty of Archeology, Hall 160



1st Session: CENTRAL & SOUTH DELTA

Chairman:	Prof. Dr. Noha	Salem
		t of Greek and Roman Antiquities, ASU.
Time	Name of Speaker(s)	Title of Paper
09.00 - 09.20	Sobhi Ashur	Graeco-Roman Sculptures from the Delta:
	Helwan University	Users, Function and Contexts: Xoite nome
09.20 - 09.40	Mostafa Rezk & Nermeen El Morsi Ministry of tourism and antiquities	Quisna Excavation season 2021-2022
09.40 - 10.00	Said Al-Assal, Sameh Elshamy & Hadeer Ali	Recent excavations in the capital of ancient Egypt (Sais)
	Ministry of tourism and antiquities	
10.00 - 10.20	Hossam Ghonim & Mahmoud Ali Arab Ministry of tourism and antiquities	Recent investigations at Tell El –Fara'in / Buto Held in Arabic
10.20 - 10.30	Questions	
10.30 - 10.50	Posters	
10.50 - 11.20	Coffee Break	
	2 nd Session: ALL I	DELTA & SINAI
Chairman:	Prof. Dr. Hassan Selim Professor of Egyptology, Ain Shams University / IFAO	
11.20 - 11.40	Mennat-Allah El Dorry Ain Shams University/IFAO Charlène Bouchaud (CNRS, MNHN, UMR 7209-AASPE) Aline Emery Barbier (MSH Mondes - UMR 8068 TEMPS) Claire Malleson (American University of Beirut) Claire Newton (Archaeobotanist)	Archaeobotany of the Egyptian Delta: State o Research

	Clémence Pagnoux		
	(CNRS, MNHN, UMR 7209-AASPE)		
11.40 - 12.00	Juliet Spedding	Lower Egyptian Relative Population Densities:	
12.00 12.00	Liverpool University One, Two, Many, Lot		
12.00 – 12.20	Hesham Hussein Director General Sinai antiquities	Ice Age in Sinai: The Documentation project of Dalma Cave	
12.20 - 12.40	Moustafa Nour el Din	Dainia Cave	
12.20 - 12.40	Scientific Center for Training in South	The enjame of cherict netroglyphs in Cabel El	
	Sinai and the Red Sea - Ministry of	The enigma of chariot petroglyphs in Gebel El- Mokaber, Southwest Sinai	
	Tourism and Antiquities	woraber, Southwest Sinai	
12.40 - 13.00	Eslam Sami	Rock inscriptions documentation project: Al-	
12.10 15.00	Ministry of tourism and antiquities	Rakayez area as a model	
		Held in Arabic	
13.00 - 13.10	Questio		
13.10 - 14.10	Lunch B	reak	
	3 rd Session: WESTERN DEI	TA & NORTH COAST	
Chairman:	Prof Dr Penn	/ Wilson	
	Chairman: Prof. Dr. Penny Wilson Director of Delta Survey Project, the Egypt Exploration Society, Durham University		
14.10 - 14.30	Bassem Mahmoud Morsi	The Harbour of Amon R ^c Temple at Naukratis:	
14.10 14.50	Ministry of tourism and antiquities	A New Evidence	
		Held in Arabic	
14.30 - 14.50	Furqan Badr & Waleed Abo zeid Nosir	Digital documentation of an excavations at Tell	
	Qadisiyah University, Iraq	Al-Baqara in Al-Beheira Governorate, season	
	(Zoom)	2017-2018, by using ArcGIS	
	· · ·	Held in Arabic	
14.50 – 15.10	Sami Mohamed Dardiry & Mohamed		
	Aly Hakim	Roman bath at Barnugi (west Delta)	
45 40 45 20	Ministry of tourism and antiquities Heba Allah Mohammed Mokhtar		
15.10 – 15.30	MoTA, Alexandria University	Monitoring the changes that occurred on the west delta coast and their impacts on	
	MOTA, Alexandria Oniversity	archaeological sites	
15.30 - 15.40	Quest	-	
	Third Day, Monday 20 th		
Th	Registration (08.30	- 09:00)	
ELTA SURVEY			
	Faculty of Archeolog	y, Hall 160	
	1st Session: WESTERN DELTA	& NORTH COAST	
Chairman:	Dr. Hisham Ell		
		mentation of Egyptian Antiquities	
		Fourism and Antiquities	
Time	Name of Speaker(s)	Title of Paper	
09.00 - 09.20	Ahmad Omar	West Delta and Northern Coast scientific	
05.00 - 05.20	Ministry of tourism and antiquities	Training Center excavations 2017: 2022	
09.20 - 09.40	Mohga Ramadan	Eat, Pray, Work, and Die at Tabbet Metawah an	
	Ministry of tourism and antiquities	Island in Mareotic Region during the Graeco-	
	,	Roman period	
09.40 - 10.00	Amany Shabaan	Late Roman-early Byzantine occupation from	
	Ministry of tourism and antiquities	Marea B at Alexandria	
10.00 - 10.20	Abdelaziz Elfadaly	Detecting the Paleo-channels Traces Close to	
	Kafr elSheikh University	The Archaeological Sites: The Case Study from	

The Northern Nile Delta of Egypt

10.20 - 10.40	Ahmed Said Elkharadly	The Temple of the Military Fortress at Tell	
	Ministry of tourism and antiquities	Abqa'in Held in Arabic	
10.40 - 10.50	Questions		
10.50 - 11.20	Coffee Break		
2 nd Session: WESTERN DELTA & NORTH COAST			
Chairman:	Prof. Dr. Ayman Wahby		
	Professor of Egyptology, Mansoura University		
11.20 - 11.40	Ahmed Naemin	The SCA Excavation at Tell Kom Azeza, 2021	
	Ministry of tourism and antiquities		
11.40 - 12.00	Ahmed Rizk al Arabi	Kom Trugi: A Beautiful Town with Baths in the	
	Ministry of tourism and antiquities	Western Nile Delta	
12.00 - 12.20	Ismael Awad	Shrines of the Maryut Region: A GIS Study	
	CEAlex /CNRS		
12.20 - 12.40	Abdou abdel Halim Mohamed	Abusir Mariout (Taposiris Magna): History of	
	Youssef	Inscriptions, Excavations, and Restoration at the Site	
	Ministry of tourism and antiquities	Held in Arabic	
12.40 - 13.00	Hany Ahmed	The Private Collections in Alexandria 2 Mary	
	Ministry of tourism and antiquities,	Lillian Kanawaty	
	Zagazig University		
13.00 - 13.20	Pascale Ballet, Loic Mazou & Patrice	The West and Central part of Buto: from the	
	Georges	necropolis to the pottery workshop (Graeco-	
	Paris Nanterre, Poitiers University	Roman period)	
13.20 - 13.30	Questions		
13.30 - 13.40	Closing Remarks		

Posters		ELTA SURVEY
Name of Author(s)	Title of Poster	
Emad Hassan Mohamed, Mohamed Mustafa Ali, Asmaa Lattif Hussein Ministry of tourism and antiquities	Excavations at the Late Roman Period Site of Al- Ashry house, Tell Timai	Eastern Delta
Reda Saleh Ministry of tourism and antiquities	How Tell el Gier changed Damietta's history	Eastern Delta
Moustafa NourelDin Ministry of tourism and antiquities, Zagazig University	Mapping Wadi Tumilat archaeological sites	Eastern Delta
Samar abu Dahab Ministry of tourism and antiquities	Quesna Ptolemaic and Roman cemetery, West Delta and Northern Coast Scientific Training Center excavation field school season February- March 2022.	South Delta
Hatem A. El Tablawy Ministry of tourism and antiquities	Study of the Arch and the Vault in Quesna Excavation season 2021/2022	South Delta
Sara Alemary & Mostafa Rezk Ministry of tourism and antiquities	Studying the human remains from Quesna cemetery and the different burial customs there	South Delta
Claire Malleson American University in Beirut	Investigations into agricultural diversity at Sais (Sa el-Hagar)	Central Delta
Karim el Ridy MoTA, Cairo University	Tell Farain Buto-Donation Stela	North Delta
Mohamed Boraik Ministry of tourism and antiquities	Rescue Excavations in Minshaat Soliman	Central Delta
Amr abdel Raouf Zagazig University	Enhancing Archaeo-geophysical Investigations in Egypt: An Application of the E- PERTI Approach in Tell El- Abqa'in	Western D. &North Coast
Aya Salem MoTA, Alexandria University	Alexandria Eastern cemetery: the Zankalony site	Western D. &North Coast
Ahmed Said Elkharadly, Khaled Abd Ghani Farhat, Zeinab Mohammed Ali Yehia, Waffa Hassan Ministry of tourism and antiquities	Recent discoveries in the Military Fortress at Tell El-Abqa'in	Western D. &North Coast



Abstracts

Excavation mission of Ain Shams University at Arab Al-Hisn: autumn season 2022

Mamdouh Eldamaty, Ali Abdelhalim, Magdy Tawheed, Elsayed Abdelaleem, Mohamed Ibrahim, Mennat-Allah El Dorry, Emad Eldin Ibrahim, Eman Nabil, Ayat El-Sayed Faculty of Archaeology, Ain Shams University

Email-contact: eldamatymamdouh@asu.edu.eg

The excavation season 2022 at Arab Al-Hisn was a continuation of the excavations being conducted by the scientific mission of Ain Shams University at the site in the north-western part of the ancient temple of Ra in Heliopolis, which started its first season on October 1, 2017. From October 16 to December 15 2022, the team conducted excavations and restoration at the site, as well as documentation and registration work for architectural elements of stone and mudbrick in different parts of the site, as well as restoration and maintenance work for some stone installations. In addition, there was a training program for students of the Faculty of Archaeology, Ain Shams University.

In this season, the mission continued excavation work on the western side of the site, in part 4B, which is located to the west of the royal banquet hall. Excavations have revealed the remains of a mud-brick building that may extend westwards under the agricultural land. In addition, large quantities of rubble were removed in the north-eastern part of the site, part 7, in preparation for the commencement of excavation work in the group of buildings built of mud bricks and at the huge stone entrance area, dating to the Third Intermediate Period.

The tomb of Ken Amun at Tell el-Maskhuta; rediscovery and short study

Aiman Ashmawy Ali SCA, MOTA Email-contact : aimanashmawy@yahoo.com

In 2010, the Supreme Council of Antiquities carried out a rescue excavation under supervision of Nasrallah al-Kilany in a private property to the north of Tell el-Maskhuta, in the site known as Rawd Iskandar that led to the discovery of a cemetery date back to the Greco-Roman period, within this cemetery he also discovered a tomb dated to the nineteenth dynasty. The Supreme Council of Antiquities completed in the same year the discovery of the tomb under supervision of Muhammad Abdul-Maksoud. The tomb belongs to Ken Amun whose title was wrongly translated as overseer of the royal records.

However, as a result of the security chaos that followed the January 2011 revolution, the tomb was subjected to acts of vandalism, the presence of thieves in the tomb for a long time and setting fires to heat caused some destruction to the tomb

As a result of this, a decision was taken to refill the tomb to preserve it, so the burial chamber was filled with pure sand. In 2019, the mission of the Supreme Council of Antiquities, headed by me, began to rediscover and study the tomb as part of a project funded by the Italian side to transfer it to Ismailia Museum in order to save the tomb since it is difficult to keep it in its place because of its severe threaten by the nearby railway line from Cairo to Ismailia

A Lost Temple of Psammuthis found at Tell Timai, Egypt

Jay Silverstein¹, Robert Littman², James Bennett

¹ Nottingham Trent University
 ² University of Hawaii
 Email-contact: Jay.silverstein@ntu.ac.uk

In 2019, foundation elements of a temple complex were uncovered in northwest Tell Timai. Excavations in 2022, provided further evidence including architecture and inscriptions indicating that there had been a large temple with a dedication to Psammuthis, an obscure Pharaoh who is reported to have ruled only one year during the 29th Dynasty. An ostracon with a name of a priest of Osiris and other ritual artifacts supports the interpretation of the complex as a Late Period temple. The temple was destroyed in antiquity, perhaps during the Persian Siege of Mendes or during a rebellion and only the lowest foundational strata have been found so far; however, continued research is focused on expanding our understanding of the extent and form of the Late Period complex. At the least, the presence of the temple demonstrates the role of the northern part of Tell Timai as an extension of the political and religious domain of Mendes during the Late Period.

How Permeable was the Egyptian Eastern Frontier for People in the Old Kingdom? À propos the changes to the temples of Tell Ibrahim Awad, Bab edh-Dhra' and Khirbet Batrawy

Manfred Bietak Austrian Academy of Sciences E-mail: manfred.bietak@univie.ac.at

In the time of the Old Kingdom, corresponding to the time of the Early Bronze II to Early Bronze III Period in the Eastern Mediterranean, three temples were transformed from broad-room to bent-axis temples. Two such temples at Bab edh-Dhra' and Khirbet Batrawy are situated in Jordan and one in the northeastern Nile Delta at Tell Ibrahim Awad. The changes show that the Early Bronze Age Culture of the Levant and that of the Old Kingdom Egyptian-held territory in the eastern Nile Delta overlapped, and that the borders were permeable in a similar fashion as in the late Middle Kingdom, during the time of the Middle Bronze Age. The question of what caused the change of temple type at approximately the same time is difficult to answer. The preference of broad-room temples for male and of bent-axis temples for female divinities, attested from the second millennium BC onwards, may have been not yet canonical at that period. Some of the temples mentioned above seem to have been used for ancestor cults. One of the few explanations is that the appearance of bent-axis temples in the southern Levant seems to have been introduced from Mesopotamia in the first half to the midst of the third millennium BCE as a part of a cultural influence from the north to the south. The new temple type made the cult image more hidden than the cult images of the broad-room temples.

Bubastis as a case study for the emergence of early urban centres in the Nile Delta

Eva Lange-Athinodorou

University Wuerzburg, Institute of Egyptology Email-contact: eva.lange@uni-wuerzburg.de

As one of the few sites containing substantial archaeological structures of the Old Kingdom, the paper will present Bubastis as a case study for the processes that led to the development of early urban centers in the Nile Delta. Based on new research, special emphasis will be given to the reconstruction of environmental factors and the assessment of their influence on the evolution of central places in the eastern Nile Delta.

Pottery from Third Intermediate Period Houses at Tell el-Retaba: Patterns and significance

Anna Wodzińska

Polish Centre of Mediterranean Archaeology and Faculty of Archaeology, University of Warsaw Email-contact : annawodzinska@uw.edu.pl

The paper's main aim is to show a general pattern of pottery found in the Third Intermediate Period houses at Tell el-Retaba. A number of Third Intermediate Period houses were excavated at the site indicating a rather organic settlement. Systematic archaeological work revealed that the spaces were occupied over time and went through some significant changes visible in the architecture, which might also indicate changes in the use of their internal rooms. Some comparative studies can be done – based on published material from Third Intermediate Period settlements. Here I would like to show material from the Delta sites such as Kom Firin, Sais, and Tanis. How can internal rooms be described? Is their function clearly defined? Is there a story pottery can tell us? The general pattern seems somewhat similar to overall pottery use also in the domestic context during the New Kingdom, but further research is needed.

What was the first New Kingdom's fortress at Tell el-Retaba?

Jozef Hudec, Květa Smoláriková, Miroslav Černý Institute of Oriental Studies, Slovak Academy of Sciences Email-contact: jozef.hudec@savba.sk

Since 1885 Tell el-Retaba has been known as a site with several fortresses. The excavations of the Polish-Slovak mission have confirmed the existence of fortifications from the 19th and the 20th Dynasty on the ground. It seems, however, that these fortifications were apparently not erected as one-time constructions; the excavations indicate that the uncovered walls comprise several chronological phases. The submitted presentation will focus on the fortification dated to the 19th Dynasty and will briefly analyse its constructional phases, based on two sections of the Petrie's wall 1, related archaeological and civil engineering data (including analysis of mudbricks), written sources, in a wider context of Egypt and the region, and with goal to discuss the question which was the first New Kingdom fortress at Tell el-Retaba.

A Palace at Pi-Ramesses

Henning Franzmeier Università di Bologna E-mail contact: <u>henning.franzmeier@unibo.it</u>

Based on the magnetic measurements of the years 1996-2012, a new area for excavations was chosen in 2016 where a monumental building was visible. After sondages in 2016 and 2017, large scale excavations since March 2022 have revealed the foundations of a palatial complex, the layout of which is reminiscent of the palace of Merenptah at Memphis. While the profound destruction did not even leave the floors of the complex, some constructional details are exceptional such as sand-filled foundation trenches below the walls. The sand contained several important finds, including ceramic materials, most likely dating to the period of the construction of the building. A first inspection points towards the reign of Ramesses II. In addition, silex (lithic) objects, partially predating the New Kingdom seem to have been brought in with the sand. Moreover, the remaining mudbricks on top of the sand foundations contain a most unusual tempering including lime or limestone, currently subject to an analysis. The ongoing work at the site makes it possible for the first time to present the remains of a monumental building at the capital of Ramesse, so often praised in hymns as a splendid city.

Tell El Deir Excavation Season 2022-2023

Kotob Fawzy Kotob Ministry of Tourism and Antiquities Email- contact: kotbfawzy31@gmail.com

Tell El Deir is one of the most important archaeological sites in Damietta. The excavation season started research at Tell El Deir with ongoing conservation and recording of contexts and discoveries.

The fieldwork on the site during this season was carried out as follows: continuing excavation in the north-eastern part of the site; ongoing recording, photography and conservation of the discoveries.

The Mission aimed to understand the history and construction of the mud-brick tombs that were uncovered in the 2021 season and to study the small finds that included amulets, pottery vessels and many golden flakes with images of different ancient Egyptian deities.

Vineyards and wine industry in Tell Heboua (Tharw) during the New Kingdom. Textual and archaeological sources

Elsayed Abd el-Alim

Faculty of Archaeology – Ain Shams University Email-contact: sinuhy@hotmail.com

The region of Tell Heboua 'Tharw' in north-western Sinai, at the extreme eastern Nile Delta, was an important source of reputable wine production in ancient Egypt, particularly during the New Kingdom. The area was fertile and drew its fresh waters from the Pelusiac branch of the Nile that penetrated the region in antiquity. Textual evidence, that has been found at several sites, especially in Upper Egypt, attests to the fame of the Tharw's region for the production of good wine. Similarly, the archaeological evidence that have been recently discovered at the site confirms the existence of wine manufacture and export to the other parts of the Egyptian state. This paper emphasizes the agricultural and commercial importance of the region during the New Kingdom and sheds some new light on the paleo-environmental conditions that contributed to the development of the wine industry, which was widely known in ancient Egypt.

Determination of Buried Archaeological Structures By Archeo-geophysical Methods (Tell Tebilla, Egypt)

Amr Abd El-Raouf¹, Penny Wilson², Gang Tian³, Ayman Wahby⁴, Hosni H. Ghazala⁵, Osman Badran ⁶

¹Zagazig University, Faculty of Science, Geology Department, Zagazig, Egypt.

² Department of Archaeology, Durham University, Durham, United Kingdom.

³School of Earth Sciences, Zhejiang University, Hangzhou, China.

⁴ Department of Egyptology, Faculty of Arts, University of Mansoura, Egypt.

⁵ Geology Department, Faculty of Science, Mansoura University, Mansoura, Egypt.

⁶ Geology Department, Faculty of Science, Damanhour University, El-Gomhouria St, Damanhour, Egypt

Email-contact: ammohammed@science.zu.edu.eg (A. Abd El-Raouf)

In this study, we investigate the integration of 2D and 3D Electrical Resistivity Tomography (ERT) geoelectrical and magnetic gradiometers in exploring archaeological sites in Tell Tebilla, Egypt. The study area is located in the Nile Delta and is known for its rich history and cultural heritage. The study's main objective was to explore and identify subsurface features that may be related to ancient Egyptian structures. The geoelectrical and magnetic data were collected using a combination of 2D/3D ERT and magnetic gradiometer surveys. The 2D ERT survey was used to identify subsurface features such as buried walls, floors, and other architectural elements. In contrast, the 3D ERT survey was used to create a more detailed subsurface model of the area. The magnetic gradiometer data was used to detect subsurface features that may be related to ancient Egyptian material, such as metal objects, mudbricks, and kilns. The study results show that integrating 2D and 3D ERT geoelectrical and magnetic gradiometer data can provide valuable information for identifying and exploring archaeological ruins. The 2D ERT data revealed several subsurface features associated with ancient Egyptian architecture, such as walls, floors, and other architectural elements. The magnetic gradiometer data also revealed several anomalies likely to be associated with thick mudbrick walls. The integration of 2D ERT, 3D ERT geoelectrical and magnetic gradiometer data allowed us to identify and explore an ancient Ptolemaic tomb. These findings provide a valuable framework for future archaeological research in the area.

Trade and economy in Tell Tebilla

Sherif M. Abd El-Moniem Ain Shams University Email-contact: sherif_arch@yahoo.com

Tell Tebilla is located about 12km to the north of Mendes and it is near Dekernis. It gained its importance in ancient times by its location at an entrance of Lake Manzala, which functioned as a sea port, while at the same time Tell Tebilla had another port on the Mendesian branch of the Nile. Tebilla's strategic location gave it importance with a maritime port at the entrance to Lake Manzala connecting it to the Mediterranean Sea, and two or more harbours on the defunct Mendesian branch to its south east and the Mansoura-Damietta branch of the Nile to its north west. The city rose to prominence, in the first Millennium BCE, particularly from the Twenty-Second through to the Thirtieth Dynasties and during the Greco-Roman Period.

The amphorae assemblage found in Tell-Tebilla can be used as a good indicator for tracking internal and external trade and can shed the light on the importance of Tebilla during the first millienium BCE and its commercial aspects. Large numbers of amphora sherds, both Egyptian and imported, show a good connection with the Mediterranean Sea especially Corinth and Rhodes, as well as the Levant area.

Application of the Raman Spectroscopy on Experimental Samples in the Study of Ancient Perfumes

Abdel Rahman Medhat (1), Sean Coughlin (2), Jay Silverstein (3), Robert Littman (3).

¹ Archaeometrist and Painted Wood Conservator, The Egyptian Museum-Member at ALCHEMIES OF SCENT. Reconstructing the Practices of Ancient Greco-Egyptian Perfumery: An Experimental Approach to the History of Science - Tell Timai Mission; ² PI. ALCHEMIES OF SCENT. Reconstructing the Practices of Ancient Greco-Egyptian Perfumery: An Experimental Approach to the History of Science;

³ Director of Tell Timai Project. E-mail contact: <u>abdelrahaman1010@yahoo.com</u>

Residues recovered from what is believed to be a Ptolemaic fragrance manufacturing centre at Tell Timai are being submitted to the MoTA for analysis. A parallel analysis on perfume ingredients derived from textual

references is also being conducted to establish the methods most effective for analysis and to create a comparative chemical signature database. Perfumers employed a variety of organic and inorganic materials to produce predictable effects in the sense of smell. Organic materials known as 'essential oils', play an important role in the archeology of perfume. Essential oils are types of fats known as terpenoids that can be used as a botanical 'fingerprint' that helps archaeologists to narrow a possible range of botanical ingredients in archaeological residues. One of the main problems, however, is that these methods are often destructive. To prevent this drawback, we use Raman spectroscopy, a micro-destructive technique. Natural polymers were studied with respect to the interference between them (degraded and complex polymers) and elucidated using thermally-aged materials meant to mimic the natural degradation of archaeological samples. Raman spectroscopy provides valuable results concerning the behavior of aged samples and the interactions between perfume ingredients. The method promises to advance our study not only of residues but of replications, by modeling their decomposition.

The West and Central part of Buto : from the necropolis to the pottery workshop (Graeco-Roman period)

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During the last campaigns in Buto, the French team, in collaboration with the German Archaeological Institute, has investigated the western part and the central-west of the site, in the kôm A, in order to understand the processes of the occupation in the latest periods — mainly the Graeco-Roman period.

The necropolis has revealed different kinds of funerary burials, for example, a collective tomb and individual burials, showing in some cases, some remains of mummification. Towards the central part of the kôm A, a new set of kilns and their production have been discovered, showing different techniques for firing and, very recently, a kiln with thousands of pieces, mainly small flasks (perfume containers) and juglets.

Graeco-Roman Sculptures from the Delta: Users, Function and Contexts: (1) The Xoite Nome

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Many highly stylized Graeco-Roman sculptures have been discovered at Delta sites, with their precise find locations and contexts being less or more documented. This paper is a preliminary initiation of an investigation into these art works, to explore their users, functions, contexts, and workshops. In order to tackle this task, the study will begin with the Xoite nome, where single finds have been made at different *koms* in the nome, such as the marble Farnese Herakles from Kom el-Taweel. Yet, another complex with its magnificent sculptures is still deserving of reconsideration: the Sakha baths excavated by Abdelmohsen el-Khashab. The sculptures found there include a bronze Dionysus, a marble Aphrodite, and a Narcissus in the Louvre. Furthermore, other Alexandrian masterpiece sculptures are known from Sakha including a bronze Aphrodite and a negro head in Alexandria, which could be an original.

Furthermore, a cult of the deified rulers can be traced back to Buto and Sakha, as evidenced by the reworked Augustus head in Stuttgart and the Caesar Barracco in Rome, as well as epigraphic data from Motobis in the Bouto area. There are known Graeco-Egyptian sculptures from this area, and a distinct workshop may have been active in Buto, but its affinities to finds from other sites, such as the statue of the commander Aristinikos from Ta-benerou (Kafr Matbul), indicate an interesting line of investigation. Delta sites are characterised by a relative lack of papyri and epigraphy, when compared to Upper Egypt. The scope of the investigation will depend likewise on epigraphic data to explore the potential dedicants, and contexts of known sculptures.

Quesna Excavation season 2021-2022

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The excavation season at Quesna, Menoufia started in October 2021, and ended in May 2022. The completion of excavation work in the northern extension of the cemetery enabled the team to explore

architectural units at the site, and the analysis of the excavation finds and human remains at the site to determine the history and the social and economic status of the people who used the cemetery.

The fieldwork was carried out in an area about 15 meters to the north of the seventh unit excavated in the previous season. It proceeded to excavate and document the material found there, then to study the archaeological finds as well as to study and analyze the human remains at the site in order to determine the burial methods and customs, and the archaeological finds associated with burials. In addition, the pottery objects and vessels were studied to understand their uses and their association with the site. The project also carried out the maintenance and restoration of archaeological elements as well as the formal documentation and registration of the archaeological finds.

A new architectural type of tomb built of mud bricks was discovered (Unit 8), consisting of three burial chambers with vaulted ceilings. The architectural design of the unit consists of a burial shaft located on the western side of the unit and on either side of two attached rooms. It leads to a main transversal vault that extends from north to south, with a depth of about 14 meters and a width of about 3.8 meters. It is distinguished by three burial chambers with vaulted ceilings heading from east to west with a width of about 2.5m wide and about 8m long.

Many objects were found during the excavations, the most important of which were some golden flakes shaped like human tongues found in the mouths of some burials, some golden flakes hammered in the form of scarabs and lotus flowers and mummification deposits, in addition to a large number of pottery vessels that had been used to transport embalming materials, resins and oils. The excavations continue from 2022 to 2023.

Recent excavations in the capital of ancient Egypt (Sais)

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The Egyptian Mission worked in Sais and found:

• the foundations of huge limestone building which could be remains of a temple from the late period, as well as part of mud brick enclosure wall.

- settlement units built in a later period, including the Eastern Villa, Western Villa and Southern Villa.
- many artefacts, including a limestone royal head, a gold earring, amulets of Neith and other deities
- inscribed stone fragments with scenes of daily life and inscriptions, model limestone obelisks, funerary stelae

• pottery including a beer-jar dating to the late period, a spinning-bowl, used in the textile industry, many oil lamps, some with Serapis images.

- ushabti figures, including one of 'Great One of Doctors' Gemenef-Hor-Bak, from the 26th dynasty.
- terracotta figurines, including 'Naukratis' fertility figures

• bronze coins of the Ptolemaic era, including one from the reign of Cleopatra 1st, Roman coins of Emperor Vespasian, bronze arrowheads, a bronze double cobra with coloured inlays, a bronze figure for Horus, a symbol of one of the provinces

• ivory hairpins, ivory dice, Ptolemaic terracotta's, sexual statues, limestone tombstones and various forms of faience amulets.

The mission also successfully developed and implemented a project plan for the reduction of the groundwater level and drained the rainwater from the site by tracing the soil layers and the source of the groundwater. The project has succeeded in draining rainwater and reducing the level of groundwater level by more than one metre, thereby helping to complete excavation work and discover and track large architectural elements.

Recent Investigations at Tell El –Fara'in / Buto

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Held in Arabic

This paper describes the results of the excavations undertaken by the MoTA Mission in the temple area of Buto. We began excavations on the western side of the temple area behind the western temple gate, in order to know about the archaeology and history of Buto Temple and its structure. We discovered a large limestone structure, whose purpose is so far unknown as well as two bath-houses and columns. Amongst the finds there were many pieces connected with Hathor, statues and pottery, dating to the Late Period. The work is still in progress.

Archaeobotany of the Egyptian Delta: State of Research

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Despite archaeobotany's long history in Egypt, starting in the late nineteenth century, it was not until the 1980s that archaeobotanical analysis took off in the Nile Delta. This paper will present an overview of the history of archaeobotanical research in the Delta specifically, with the mention of a few case studies from the Delta. In Merimde Beni Salama, for example, the research is oriented towards better understanding the arrival of domesticated cereals and agriculture in Egypt. At Bouto, early contexts on the site from the Pre- and Early Dynastic period provide a chance to understand the environment and plant exploitation at this pivotal moment in Egyptian history. Roman contexts from Bouto further inform our understanding of agricultural practices and storage of cereals. At Plinthine, the analysis explores agricultural land, viticulture and fuel management, especially between the New Kingdom and Early Roman period. At the ninth-tenth century AD monastic settlement of St John the Little in Wadi al-Natrun, the foodways and agricultural practices of the monks dwelling in the arid desert is the focus of the archaeobotanical investigations.

This paper will present the diversity of the research questions that archaeobotanical investigations have tackled in the Delta, highlighting the importance of continued botanical research in this area.

Lower Egyptian Relative Population Densities: One, Two, Many, Lots....

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Butzer's 1976 work on the population of Ancient Egypt provided a blueprint for future work in this area. His methodology used archaeological evidence to provide separate population estimates for the Nile Valley, the Delta, the Fayum, and the Deserts (Eastern and Western) for six periods from the Predynastic to Ptolemaic Period (4,000-150 BCE). However, he only provided detailed estimates for relative population densities of the 22 nomes of Upper Egypt and the 1st Lower Egyptian (Memphite) nome, possibly because his assumption that relative population densities (as opposed to population size) remained fairly constant from 3,000 to 1,000 BCE was more problematic for the Delta. Here, we apply Butzer's method to provide estimates of relative population densities for the 2nd-20th nomes of Lower Egypt. To allow for more spatially dynamic population development in the Delta, we however refined Butzer's approach by analysing relative population densities of nomes in discrete time steps, from the Predynastic (c.5300-3000 BCE) through to the Ptolemaic Period (332-30 BCE). This has enabled a better understanding of any potential shifts in population between nomes and across the Western, Central, and Eastern regions of the Delta

This study is part of the Leverhulme-funded Biodiversity in Egyptian Archaeology During Societal Transitions (BEAST) project at the University of Liverpool, York University, and the American University in Cairo. BEAST aims to investigate connections between environmental change, animal use, and society by analysing outputs of quantitative ecological models in the context of Egyptian archaeology in order to establish drivers of livelihood transitions, societal change, and historical events.

The Ice Age in Sinai: The Documentation Project of Dalma Cave

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In 2021, the Egyptian team of the Rock Inscriptions Documentation Project launched a short survey visit to the Wadi Dalma area, searching for a reported cave full of animal engravings. At that time Dalma cave was uncharted, and there were no official records, or documentation known of Dalma Cave, except a brief report

published in 2012 by Hungarian scholar Andras Zboray, who visited the site in 2001, with support of his Egyptian naturalist friend, despite the area being a very restricted military area and no one – even Egyptians - allowed to visit without permission.

The Egyptian mission succeeded in locating the cave after surveying the area. Dalma cave is located 15km southwest of Al-Gifgafa village, and 55km east of the Bitter Lakes. The cave has its name derived from the main wadi el-Dalma which means Darkness as mentioned in the topographical map of 1956, but local Bedouins pronounce the word Zolma that also means darkness. The cave contains, among other things, several images of bovids executed in a vigorous naturalistic, 'Franco-Cantabrian, Lascaux-like' style, which is quite different from the stylized cattle representations in the 'classical' Predynastic iconography of the fourth millennium BC. Sometimes, the animals appear to be moving, indicated by curved backs and bent legs, and other animals are superimposed on one another, moving in different directions and orientations. Dalma Bovids are similar to rock art known from Qurta and Wadi Abu Subeira north of Aswan, also in Europe during the Ice Age.

The enigma of chariot petroglyphs in Gebel El-Mokaber, Southeast Sinai

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Petroglyphs of animal-drawn carts were found in Gebel El-Mokaber (جبل ال مكبر) site in southwest Sinai, in the Ramlet al-Habbus area, north of Serabit El-Khadim, along with a Nabataean inscription and some signs and scenes of animals and people. These carts were known in the ancient world for being used in the military and in hunting, in addition to being a means of transportation. The cart is also a manifestation of ownership and a high social status. These petroglyphs seem strange to the desert environment in the region. This presentation describes these drawings and analyzes the reasons for their existence and the time period they refer to, while comparing them with their counterparts in the Arabian Peninsula and the Negev. It also addresses the study of petroglyphs for horses and one Nabatean inscription in Gebel El-Mokaber.

Rock inscriptions documentation project: Al-Rakayez area as a model

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Held in Arabic

The Rock Inscriptions Documentation Project was launched in 2018 by the Egyptian team in The Supreme Council of Antiquities. The project aimed to catalogue and document the ancient rock inscriptions found in Egypt that can be used for research purposes. This project seeks to provide a comprehensive database of rock inscriptions that can be used to better understand the history and culture of the region. In 2019, we launched the second phase of the Project in South Sinai, where the inscriptions of Rod Omaira and wadi el-Nasab have been documented. After That, the documentation project started at wadi Al-Sahw and Wadi Al-Rakayez.

I will talk in Arabic about the documentation project of Wadi Al-Rakayez (southern Sinai). The Wadi is located in South Sinai, twenty kilometres east of the city of Abu Rudeis. The study of the rock art and inscriptions of Wadi Al-Rakayez which dated back to the Nabatean period proved that they haven't been published before. Wadi Al-Rakayez's rock art and inscriptions were well documented using different techniques, photographing all the inscriptions and rock drawings; to produce a line drawing of the engravings, to facilitate reading and translating the inscriptions.

The Harbour of Amon Ra Temple at Naukratis: New Evidence

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Held in Arabic

During the 2022 excavation season, the Egyptian mission of the Supreme Council of Antiquities headed by Bassem Morsi uncovered new evidence relating to the harbour of the Amon Ra temple at Naukratis. The new evidence includes remains of a large mudbrick floor at the suggested place of the harbour of the Amon Ra temple. The temple of Amon Ra was the largest building in the town and it seems that it has a large harbour similar to other Amon Ra temples in Egypt. The discovered evidence brings us to a closer look at the ancient Egyptian temple harbours, especially those of Amon Ra temples. Further light may come from a comparison of this work with the magnetic survey results of the British Museum at the site.

Digital documentation of an excavations at Tell Al-Baqara in Al-Beheira Governorate, season 2017-2018, using ArcGIS

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Tell Kom al-Baqara is located in the center of Hosh Issa in the Beheira governorate, about 20 km southwest of the city of Damanhour and 52 km southeast of Alexandria. According to the available historical sources, the site was previously referred to in 1989, but it did not appear on the cadastral maps of Egypt in 1910, nor in the topographical survey of Egypt in 1992.

The results of work by the archaeological mission at the site revealed the presence of architectural elements dating back to different historical eras, the oldest of which dates back to the Ptolemaic era until the Byzantine era. Also found were architectural units that extended outside the work area. There was a huge group of walls that formed more regular and solid architectural units than earlier ones, consisting of three successive stages of construction on top of each other. These architectural features indicate that the walls are a type of military building that was common in historical periods. In addition, a fragment was found with a relief inscription of one of the ancient Roman gods, Isis. There was also a group of storehouses and amphoras were found stacked on top of each other or side by side. Numerous bronze coins from the Roman era were found at the site and other types of pottery, such as oil lamps, storage vessels and perfume bottles dating back to the Hellenistic period.

The study aims to create a digital database to document the excavations for the years 2017-2018 using Arc GIS by archiving the study area, and matching a number of satellite images of the study area and excavation squares. The archaeological aaterial that was found in each square of the study area is then documented in a database within an ArcGIS program using the Attribute Table.

A Roman Bath-house at Barnugi, (West Delta)

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The site of Tell El-Barnugi is located about 15 km south east of Damanhur and 52km south of Alexandria. The site is divided into two mounds separated from each other by Masraf El-Barnugi which was dug in 1935. The site was important in Pharaonic times in the Middle Kingdom and continued to the Late Roman period. Two Roman cemeteries were excavated by the SCA and an unpublished inscribed dedication to Ptolemy VIII by the Jews of Nitriai probably came from here. Blocks of Tuthmosis III and Ramesses II were reported from the site by Edgar in 1911. El-Barnugi was probably a huge town controlling other small villages around it such as Kom Umm El Laban, Kom al-Ahmar and Abu Agora. The town was famous in antiquity as a place from which natron was extracted.

No previous excavation had been carried out in the southern tell, but there was an archeological survey by the EES in 2004, and an archeological survey of the wine production in the west Delta in 2009. Recently, the Ministry of Antiquities conducted an excavation at the site of El-Barnugi and uncovered a building representing a public Roman bath in the south west of the tell. The bath was built of red bricks and consists of three units: the main basins at the south of the building, from which extend the drainage system, which is a pipe made of red bricks, extending from south to north; the main rooms of the bath consist of three rooms — the cold, warm, and hot areas. The service corridor lies at the east of the bath and has two windows for serving the bath. According to the finds, the bath dates to Roman period and perhaps continued until the Late Roman period.

The excavation is still ongoing for the second season in the north, south, and west directions of the bath to reveal its extent and the associated artifacts.

Monitoring the changes that occurred on the west delta coast and their impacts on archaeological sites

Samia El-Merghani¹ & Heba Allah Mohammed Mokhtar² ¹ Ministry of Tourism and Antiquities, Egypt. ² Geomorphology & GIS, Faculty of Arts, Alexandria University, Egypt. Email-contact: h.mokhtar@alexu.edu.eg The west Delta coast has been exposed to much change. Since the construction of the Aswan High Dam in 1964, there has been concern that the Egyptian coastline along the Mediterranean Sea would suffer from increased erosion. The dam effectively stopped the supply of sediment carried by the River Nile to the Mediterranean and so left the coastline without a shore building capability. This paper intends to draw attention to a number of recent warnings issued by national and local organizations about how seriously sea levels are rising owing to global climate change. If these changes occur, numerous ancient relics in the Kafr Ash-Sheikh Governorate may vanish, with potentially serious repercussions for Egypt.

Accordingly, this paper will focus on the west delta coast by applying remote sensing techniques and GIS. By using four satellite images Landsat 1 MSS, Landsat 5 TM, Landsat 8 and Landsat 9 in the period 1972 to 2023 along with DEM Alos Palasar with resolution of 12.5m, data has been collected of wave run-up, tide and temperature rates in order to monitor their effects on the coast and the archaeological sites. Therefore, we must investigate the area that is in danger and the archaeological sites that will be submerged in order to decide how to handle this situation. We must also look into the effects of climate change and develop the necessary cautious preventive measures in order to avoid damaging effects on the archaeological sites that are extremely close to the sea in Delta areas.

West Delta and Northern Coast scientific Training Center excavations 2017: 2022

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Excavations of the MoTA were carried out in several sites in the Delta since the West Delta and Northern Coast Scientific Training Center was created in 2017 as a part of a programme of training field schools.

2017: Work was carried out at Tell Abu Mandour-Rosetta, that lies to the south of the modern city of Rosetta by the west bank of the Rosetta Nile branch. The mound seemed to have been occupied in the Islamic period, as the excavations revealed a fortress, houses, magazines and workshops. The excavation area was located on the west edge of the hill. The remains of what was probably the south-western corner of a complex of buildings of red brick was uncovered, that continued to the east beyond the mound.

2019 - 2022: The archaeological site of Kom Al-Nadoura was located at Bahri Bey Street, al-Labban quarter, El Gomrok district. Three seasons of work resulted in the excavation of a group of walls forming a rectangular structure, which was plastered with hydraulic mortar on the inside. The building continued to the north and south, and probably to the west beyond the present limit of excavation

2021: Kom Firin in the Western Delta, about 5 km to the north-west of the modern town of Dilenjat, El-Behera Governorate. The excavation uncovered a group of walls of mud-bricks dating to the New Kingdom, according to the size of mud brick blocks, but the pottery sherds dated from the end of the New Kingdom up to the Greco-Roman period.

2022: Quesna cemetery site located near by the industrial area in Menoufia. The excavation found a number of burials, that were badly preserved. According to the pottery coffins and the amphorae, the site could be dated from the late Ptolemaic period to the early Roman period.

Eat, Pray, Work, and Die at Tabbet Metawah: an Island in the Mareotic Region during the Graeco-Roman period

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The Tabbet Metawah archaeological site is located on the southern coast of Lake Mariout, about 20 kilometres southwest of Alexandria. This study will delve into life on that island during the Graeco-Roman period using the recent excavation results conducted on the island in early 2022 by an Egyptian mission affiliated with MoTA.

A settlement area dating to the Ptolemaic period occupied the upper part of the site in two phases. This area is made up of many units that served various functions such as food preparation, industrial and religious purposes. The area was abandoned for a long time until the northern part was eventually used as an industrial area when a lime kiln was constructed in the Roman period, destroying the earliest units. The area was then again deserted and became a Bedouin cemetery during the Islamic period.

The people who lived in the Ptolemaic settlement buried their dead in the hypogeum located in the area to the northwest of the settlement area. An Early Roman pottery workshop was discovered in the eastern

depression area of the site near the lake, where three pottery kilns were found. Two of them have a unique design in comparison to other amphora kilns discovered in the Mariout region.

Late Roman-early Byzantine occupation from Marea B at Alexandria

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The Supreme Council of Antiquities has executed rescue excavations in site point number GMR0022 in Marea B west of Alexandria on the Cairo-Borg El-Arab Desert Road. That site was an important stopover for the pilgrims who used to come from many places to visit the tomb of Sait Menas (Abu Mîna). The excavations uncovered an occupation level that consisted of several chambers and structures which were built using Roman and Byzantine building methods.

This settlement is dated to the Late Roman-early Byzantine period on the grounds of coins, and lamps found in the rooms. Furthermore, an assemblage of pottery dating to the Late Roman and early Byzantine periods suggests the domestic nature of the site.

Big Remote Sensing Data in Detecting the Paleo-channels Traces Close to The Archaeological Sites: The Case Study from The Northern Nile Delta of Egypt

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The Nile Delta of Egypt has been inhabited by ancient people since the pre-dynastic period, especially the famous city of Buto. In addition, many Pharaonic, Greek-Roman, Coptic, and Islamic archaeological sites have been found in the Delta of Egypt. Due to some natural factors (e.g., climate change and Nile flood events), and anthropogenic activities (e.g., land reclamation and urban sprawl), the ancient landscape of the Delta has totally disappeared. Recent advances in space technology and remote sensing data methods have enabled archaeologists to gain some important information about ancient landscapes. This study aims to integrate big remote sensing data (Sentinel 1 and 2) in order to detect some unknown and buried channels, which can help to discover some ancient settlements. In this research, some vegetation indices in combination with the steps used in analysing the Radar Sentinel 1 data are used to extract some valuable information about the paleo-channels of the river. To process the data for this study, SNAP, ArcMap, and Envi software besides the Google Earth [™]Engine (GEE) platform are used. The results of this study can help in preparing a digital archaeological map of the study area, discovering some potential archaeological sites, and providing information about the nature of the ancient land cover of the Nile Delta during the various eras.

The Temple of the Military Fortress at Tell Abqa'in

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The site of Tell Abqa'in is located 75 km south-east of Alexandria and 5 km south-east of the modern town of Hosh-Isa in El-Beheira Governorate. The site has long been considered as one of a chain of forts constructed during the reign of Ramesses II on the edge of the Western Delta and the site is located in the third region of Lower Egypt in the Pharaonic era.

In March 2015 the Egyptian Archaeological Mission, directed by Dr Ahmed Said Elkharadly, conducted limited excavations and surface survey at Tell el - Abqa'in for seven seasons, in three chosen sites. The El-Beheira Team based their work on the results of previous missions at El-Abqa'in, and in particular, they wanted to locate the temple of the fort. Some theories had been proposed to help to answer this question, but the archaeological evidence was lacking.

At the North East inside the enclosure wall of the fort, we noticed a lot of fragments of limestone spread on the surface so we decided to open a new small square of 5 x 5 m. The location was in a low-lying place and when we started to excavate, we found many limestone layers and some fragments of blocks inscribed with the cartouches of king Ramses II. We suggested that these stones had been transferred from the temple, having been used to build the temple. Furthermore, we suggested that the temple was located inside the enclosure wall of the fort in the central part from the north-east side on one axis with the southern gate, exactly like the plan of the New kingdom Temples, and also like the plan of the fort of Zawiyet Umm El–Rakham. The temple may have been destroyed later in the Roman period.

The SCA Excavation at Tell Kom Azeza, 2021

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The Tell of Kom Azeza is about 9 km from the city of Abu Homs, Buhaira Governorate, and about 12 km southwest of the centre of Idku, on the south-eastern outskirts of Lake Idku. A large cemetery was found in it, that dates from the Early Predynastic Period to the Greco-Roman period. The cemetery has clear examples of several different burial methods that the ancient Egyptian followed since the early dynastic era in preserving the bodies from the dangers in the other world. The burial types begin with simple burial pits, and then continue with the construction of simple tombs in the form of mud-brick terraces, showing the ingenuity of the ancient Egyptians in exploiting the available environmental resources to serve their various purposes.

The site also contained a pottery workshop complete with areas for kneading clay, shaping, drying, and firing. It was dated to the reign of King Ptolemy II (Philadelphus) 285-246 BCE, and continued until the beginning of the Roman period. Remnants of some mud-brick housing units were also found, some of which date back to the Old Kingdom period, while others are from the Greco-Roman period, according to a study of the archaeological finds that were found inside those dwellings.

Kom Trugi: A Beautiful Town with Baths in the Western Nile Delta

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During the 2019/2020, and 2021 excavation seasons, the Egyptian mission of the Supreme Council of Antiquities headed by Ahmed Rezk Al Arabi uncovered remains of religious, commercial, and industrial facilities at Kom Trugi site. The uncovered buildings include remains of a small Graeco-Roman temple and remnants of a pottery workshop from the early Arab period. In antiquity, Kom Trugi was a beautiful town with baths and an essential inland port on Lake Mareotis. The town, which is located today 6 km due north of Abo El Matamir, Beheira governorate, close to the Mediterranean Sea, owes its importance to its location, it appears to have played a role in commercial transportation on Lake Mareotis. The newly discovered facilities together with standing buildings cast new light upon the religious and economic life of the inhabitants of Kom Trugi during these periods.

Shrines of the Maryut region: a GIS study

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The archaeological map project carried out by the Centre d'Etudes Alexandrines (CEAlex) since 2013 aims to collect and document all the data on the ancient Maryut region, currently undergoing an urban and industrial development which threatens archaeological sites, and eventually to provide these collected data to the Ministry of Tourism and Antiquities of Egypt in the form of a Geographic Information System (GIS).

One of the most interesting features we chose to study are the shrines¹, observed in old maps and represented by a specific symbol, mostly bearing the name of a holy sheikh, with various mentions of Arabic origin, which may refer to the deceased person, such as Sîdi, Sheikh, Maqâm Waliy, or to the structure, such as Santon, Manâma, Maqâm, Darîh or Qabr.

Due to the particular architectural shape of the shrine, the collection of data process has been successfully achieved by cartographic studies through various maps and satellite images, then checked through field surveys. More than 200 shrines have been identified and located so far in the Maryut region according to the different series of maps edited between 1801 and 1940.

In addition to the importance of the shrines from a patrimonial and historical point of view, they can be very useful to indicate the existence of an ancient archeological site and also to preserve it, because almost half of them are located on tells (koms) and karms in the Maryut region.

Abusir Mariout (Taposiris Magna): History of Inscriptions, Excavations, and Restoration at the Site

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Held in Arabic

Taposiris Magna is located about 45 km west of Alexandria, overlooking the Mediterranean Sea to the north and Lake Mariout to the south. It had historical importance from the ancient Egyptian eras, through the Greek, Roman and Byzantine periods, to the Islamic periods, and it had great economic importance, for agriculture. The area surrounding the vineyards included many monuments: an ancient Egyptian-style temple, a Tower, human and animal Cemeteries, baths, a church, wells, quarries, houses, kilns and a port.

We will trace the mentions of the site in many works, beginning with the writings of historians, geographers, travelers, and Classical writers in the period from the 6 BCE until the 6th century CE, then in the writings of travellers and historians of the 18th century, and the increased writings about the site by travellers and historians of the 19th century, up to 20th-21st centuries.

We will also discuss the excavations and restoration work at the site, which lasted for more than a century and has not yet ended, from that started by Evaristo Breccia, to Achille Adriani, Rashid Neuer, then Edward Ochsenschlager, Faisal Al-Ashmawy and Izzat Al-Hamahamy, then Győző Vörös, and Marie-Françoise Boussac. Current work is carried out by the University of Lyon mission, directed by Bérangère Redon (IFAO-MFTMP), as well as the joint mission between the SCA and the Universidad Autónoma de Santo Domingo. Many Restoration works have taken place at the site, including those driected by Breccia, Adriani and Jasper Brinton, then the SCA and the missions working on the site until the present day.

The Private Collections in Alexandria 2: Mary Lilian Kanawaty Hany Ahmed

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Lilian Kanawaty is considered one of the main antique dealers in Alexandria before the Antiquities Protection Law was issued. The Kanawaty collection consists of 753 objects registered in number 694 of the register book. There are 695 objects that belong to the Late Period and the Hellenistic and Roman eras. This group consists of 38 pottery vessels, 408 lamps, 3 stone vessels, 97 statues, 76 amulets and ornaments, 72 coins, in addition to a coffin with the mummy; the rest of the group dates to the Islamic era.

The owner keeps this collection in his antiquities shop in Khan al-Khalili in Alexandria, where the antiquities are divided into groups, each group in several transparent plastic bags and placed inside a wooden box on the second floor inside the shop. The coffin containing a mummy is fixed on the wall with a vertical iron rivet, and the coffin lid is fixed by means of iron hinges on the left side, with an iron hook fixed on the right side, so that the owner can open and close it easily while it is shown to foreign visitors to the shop. The register book kept in Cairo does not contain pictures except of a few of the objects, so the Ministry of Antiquities does not have any recent pictures of this collection.

¹ A shrine is a sacred or holy space dedicated to a specific ancestor, martyr, saint or similar figure of respect, wherein they are venerated or worshipped.

Abstracts of Posters

New discoveries at Quesna cemetery site 2022

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The cemetery site at Quesna city is located near the industrial area in Menoufia Governorate. It is one of the most important sites of the Delta, thus the Supreme Council of Antiquities carried out excavations in the 1990s, which resulted in the discovery of a huge cemetery dating to the Late Period, that continued in use through the Ptolemaic and Roman period. A geophysical survey was carried out in 2006 through cooperation with the Egypt Exploration Society to determine the full extent of the cemetery. Then, parts of the Ptolemaic-Roman cemetery were excavated as well as the entrance to the Falcon cemetery from 2007 until 2011.

The excavations were carried out in the site as part of a training Field School, which was managed by the West Delta and Northern Coast Scientific Training Center in February-March 2022. The site was located approximately 30 m from the Quesna inspectorate and 75 m from the Late Period tombs. The excavation resulted in the discovery of a number of burials, that were badly preserved. According to the pottery coffins and the amphorae, the site could be dated from the late Ptolemaic period until the early Roman period.

The cemetery gives information about coffin types (double-vessel and anthropoid coffins), grave types (burial pits and mud lined graves), and burial practices, including funerary rituals, grave goods, body treatment, burial orientation, and burial position. The preliminary study of the human remains was carried out to determine the percentage of males, females and children, and their ages, as well as identifying some common diseases.

A Study of the Arch and the Vault in Quesna Excavation season 2021/2022

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The excavation season started on 5th December 2021, ended on 23th June 2022 at Quesna archaeological area with ongoing conservation and recording of contexts and finds. The fieldwork uncovered a set of Late Period and Ptolemaic tombs with vaults. The appearance of the architectural elements constituting the eighth unit was completed, and it consists of three rooms facing west, followed by a transverse basement A, that extends from north to south by approximately 8 m. From it three basements B, C1, C2 branch off in a direction from west to east with vaulted entrances opening in the first basement A. The vaults C1 and C2 had completely collapsed into the interior, but their form could be understood. This poster will describe the tombs and vaults and set them into their architectural and functional contexts.

Rescue Excavations in Minshat Soliman Mohamed Boraik The Ministry of Tourism and Antiquities Email-contact: zom717@yahoo.com

The poster will record the results of salvage excavations that took place by the Ministry of Tourism and Antiquities in the archaeological site of Minshat Soliman, Kafr el Zayat.

Recent discoveries in the Military Fortress at Tell El-Abqa'in

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Tell El-Abqa'in archaeological site, in El-Beheira antiquities area, is considered one of the most important archaeological sites in the Western Delta, as it is one of its fortified sites. The site has multiple archaeological layers, the oldest of which is from the reign of King Ramesses II, in the New Kingdom.

Many surveys, geological researches and archaeological studies, have been carried out up until 2010. From March 2015 to 2022, excavations were carried out in by the Egyptian Archaeological Mission, directed by Dr Ahmed Said Elkharadly to understand the architectural aspects of the military fortress at Tell El- Abqa'in.

This paper deals with architectural construction of the military fortress at Tell El-Abqa'in. It was a rectangular building with a gate on the south side and, inside it, various architectural units. The Mission discovered the northwest, south-west and north-eastern corners, plus sections of the north, east, south, and west wall, as well as the south gate with towers inside and outside it. Inside the enclosure wall of the Fort, there were residential units, a bath-house, grain silos, a small temple, and wells were rediscovered in the southeast corner. The fort is very similar to the plan of the fort of Zawiyet Umm El- Rakham on the North Coast, near Mersa Matruh and suggests it is part of the overall Ramesside plan for the fortification of the western frontier of Egypt.

Enhancing Archaeo-geophysical Investigations in Egypt: An Application of the E- PERTI Approach in Tell El-Abqa'in

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Tell El- Abqa'in archaeological site is located 75 km south-east of Alexandria and 5 km south-east of the modern town of Hosh Isa in El- Behira Governorate; the place is a fort constructed during the reign of Ramesses II on the edge of the Western Delta. Using the Extension of the Data-Adaptive Probability-Based Electrical Resistivity Tomography Inversion Method (E-PERTI) for archaeo-geophysical investigations at Tell El- Abqa'in, Egypt, is a novel and effective method for mapping archaeological material buried at this important archaeological site. The 2D electrical resistivity tomography allows for the non-invasive imaging of subsurface features. A geoelectrical survey in the form of 2D ERT was conducted in the northern part of the site. The dipole-dipole (DD) electrode array was used to create six Electrical Resistivity Tomographies (ERTs), of about equal spacing and west of the previous excavation site. For the first time, the extended probabilistic electrical resistivity tomography inversion method (E-PERTI) was used to predict the resistivity distribution of a sizable dataset. In this manner, groups of aligned, circular, high resistivity anomalies associated with the remains of grain silos were discovered. This study provides a useful example of how using the E- PERTI approach can enhance archaeo-geophysical investigations. These results could be recommended to help archaeologists in future excavation planning, as they are both cost-effective and time-efficient.

A new insight into a donation stela from Tell-Farain (Buto)

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A donation Stela from Tell-Farain (Buto) is of exceptional historical significance as described by Sauneron (*BSFE* 24, 1957: 51-54, fig. 1-2). It represented Tefnakht, the founder of the 24th dynasty, before his coronation. He bears an important, rare title: $wr \leq n t_3 dr f$ 'Great Chief of the Entire Land', that has important historical connotations.

Despite the historical importance of the stela, it deserves further study, Therefore, this research will analyse it in order to shed light on it in terms of understanding the historical context in which Tefnakht succeeded in establishing the foundations of his control over the West. Furthermore, through the study of this deity Harendotes and a harpist called Hori, represented in the stela, the paper will provide an in-depth insight into the ethnic context that the stela clearly highlights.

Excavation of the Late Roman Period Site of Al-Ashry house, Tell Timai (Thmuis)

Emad Hassan Mohamed, Mohamed Mustafa Ali, Asmaa Lattif Hussein Ministry of Tourism and Antiquities Email contact: emad.hassan22@yahoo.com ; malhadry1989@gmail.com ; asmaa.lattif@yahoo.com Al-Ashry house is located in the north-eastern Nile Delta in Daqahliya governorate, 20 km southeast of Mansura. The site occupies an area of 150 m and was the location of old house built on a part of Tell Timai more than 100 years ago, amongst the ruins of the Greco-Roman Egyptian city of Thmuis.

The owner of the house wanted to rebuild his old house and during the construction work, some stone blocks came to light. An Egyptian archaeological mission began excavations there from December 2021 to January 2022. During the work, two levels appeared, the Late Roman period and the Early Roman period. The excavation covered a settlement mostly from Late Roman period, with features that are primarily connected with food production, and included cylindrical ovens. The paper focuses on the findings and archaeological work carried out by the Egyptian mission.

How Tell El Deir changed Damietta's history

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Tell El Deir is one of the most important archaeological sites in Damietta. The recent excavations at this site changed Damietta's history. The excavations have proven that Tell al-Deir is a huge cemetery that was used throughout different ages over periods of time that were not mentioned before by historians. This poster will show the most important archaeological discoveries during the Excavation seasons since 2007 until now including sarcophagi, amulets, pottery vessels, shabti statues, many golden flakes with inscriptions and showing different ancient Egyptian deities and gold and bronze coins.

Alexandria's Eastern Cemetery: Zankalony site

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In 2015 a salvage excavation was carried out by the Egyptian Ministry of Tourism and Antiquities team in Zankalony archaeological site located about, 39/66 Gash Road, El- Zankalony Street, as a part of the procedures required by the municipality to build or rebuild on empty space of land. This site was one of the graveyards of the Eastern Cemetery of Alexandria, and as a result of the work, an important portion of the Eastern Cemetery was discovered and recorded. A number of burials have been excavated and classified into three groups: burial pits, cist graves and loculi. In addition, two types of coffin have been found: anthropoid mud coffins and mud plaster coffins with golden ships. The most importance point of the paper is that it provides a study of the materials used in the treatment of the body in the Greco-Roman period and the extent of similarity and difference between them and the materials used in ancient Egypt. Using IR-analysis to understand the constituents of the materials used, samples from the site are compared with other samples from the Western cemetery and published by CEAlex.

Studying the human remains from Quesna cemetery and the different burial customs there

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The Quesna quarries antiquities area is an important and unique archaeological area in the Delta in general and in the Menoufia Governorate in particular. This area is considered one of the most important and newest archaeological sites discovered in the Delta. The archaeological site includes three important archaeological sites: the cemetery site, which contains several adjacent burial units, the sacred bird cemetery, and the last site is considered an extension of the cemetery and contains several pottery coffins dating back to the Roman period. The mission of the Ministry of Tourism and Antiquities worked at site (A) and completed the discovery of the architectural units of the cemetery, which were used for burials for several successive periods. Through the human remains discovered during the seasons of the mission's work, we found a great diversity in burial habits, embalming methods, and their quality. By examining and studying the discovered human remains, we were able to know some of the common features among the population, as well as the impact of the environment surrounding humans on their bodies and some diseases that were associated with their daily lives.

Mapping Wadi Tumilat's Archaeological Sites

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Wadi Tumilat, a narrow strip of wetland on the northern side of the eastern desert of Egypt, is a natural valley located in northeastern Egypt in Ismailia Governorate. Archaeological sites are scattered along the valley and several missions have carried out archaeological surveys in Wadi Tumilat: a German mission in1930, an SCA mission in 1977, and a Canadian mission during 1977 to 1983. During a project to survey the valley, I found that the previous studies needed to be checked and updated properly. In some cases, there were some corrections, after I had visited all the sites mentioned in previous studies and reports. This study confirmed that there were 66 sites dating from the predynastic period, through the Pharaonic period until the Roman period. The survey also recorded for the first time the specific coordinates of all the sites in the valley. These sites were divided into three groups: the first were sites under the supervision of the SCA; the second were sites where excavations had beencarried out but had been excluded from the archaeological site list; the third group were sites that were only mentioned in reports.

Investigations into agricultural diversity at Sais (Sa el-Hagar)

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Archaeobotanical studies have been conducted at the site of Sais for many years. A synthesis of the data from several specialists now reveals the diversity of crops grown in this area, and interpretation of the evidence indicates that the range of crops (emmer wheat, barley, lentils, flax, and grapes) was broader than we usually find in archaeobotanical assemblages from Egypt. The exceptionally high presence of linen capsule fragments in the New Kingdom is a remarkable result considering the non-optimal preservation conditions at the site, and may well be an indication that Sais was a major producer of raw linen for textile production. The general lack of evidence for lentils in Egypt seems to indicate that they were never a major crop, and they are likely to have been grown in smaller, manually watered plots on higher ground around villages. However, the consistent presence of lentils throughout all phases at Sais indicates that they were an important supplement to the staple diet of grain-based foods in this town, and may have been cultivated on a larger-scale than elsewhere. Finally, the presence of grape seeds in all phases seem to hint at the presence of vineyards around Sais, and they may well have been consumed as a table-fruit as well as having been used for wine production. In summary, the Sais agricultural landscape seems to have been especially rich, particularly during the Ramesside 19-20th dynasty.