



**The Supreme Council of Antiquities
The Egypt Exploration Society**

Delta Survey Workshop



**The British Council,
192 Sharia el-Nil, Agouza, Cairo**

**Thursday 26 March 2009
9.00am - 5.00pm**

Participants

Mohammed Ali
Manfred Bietak
Janine Bourriau
Gad El-Cady
Marek Chlodnicki
Hans Fischer-Elfert
Irene Forstner-Müller
Clément Flaux
Mohammed Abdel Aziz Gabr
Mohamed Hamdan
Ulrich Hartung
Fekri Hassan
Sabri Hassanein
Frands Herschend
Moustafa Abou Hussein
Asma Sayed Ibrahim
Esraa Sayed Ibrahim
Amina Jaheen
Mariusz Jucha
Mohammed Kennawi
Sabri Abdel Aziz Khater
Reem El-Khodary
Jaromir Krejcy
Sabine Laemmel
Eva Lange
François Leclère
Hisham El-Leithy

Manuela Lehmann
Mohammed Abdel Makhsoud
Mandy Mamedow
Maha Mansour
Sherif Mohammed
Yasmin Hassan Mustafa
Chris Naunton
Laure Pantalacci
Mikaël Pesanti
Julia Race
Shaima Abdel Rahman
Mohammed Neguib Reda
Joanne Rowland
Daniella Rosenow
Faten Abdel Halim Saleh
Robert Schiestl
Stephan Seidlmayer
Ashraf Senussi
Mahmoud Mohammed el-Shafei
Ian Shaw
Paul Sinclair
Jeffrey Spencer
Patricia Spencer
Geoffrey Tassie
Susanna Thomas
Joris Van Wetering
Penny Wilson

SCA/EES Delta Survey Workshop

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Morning Session

Introduction

Dr Jeffrey Spencer opened the proceedings by welcoming participants and outlining the aims of the Workshop – to exchange information, and establish priorities for future work in the Delta. He thanked the SCA, and especially Dr Zahi Hawass, for agreeing to host the event jointly with the EES. Dr Spencer introduced Mr Sabri Abdel Aziz Khater who thanked the EES for organising the event and the British Council for the use of their facilities.

Mr Sabri Abdel Aziz reminded participants of the SCA's policy of encouraging fieldwork in the Delta by not accepting new applications for missions to excavate in Upper Egypt. He stressed the continuing importance of research in the Delta where there are so many pressures from modern development and the needs of agriculture, and drew attention to the work of the EAIS in mapping all the sites of the Delta and publishing them in the 'Atlas' as it is important to define boundaries to guard against encroachment. Another threat to antiquities is represented by the recent spate of attacks on SCA magazines, and security would be improved at older magazines and new, better protected, stores would be built. The SCA is also now actively engaged in protecting important Delta sites, such as Tanis and Tell Basta, with encircling walls and fences, as has already been done for some sites further south, such as Giza, but protection would also be improved if there can be increased understanding of and respect for ancient sites by local populations. A new law will be discussed by the Egyptian parliament that will increase penalties for illicit excavation. Mr Sabri Abdel Aziz thanked the participants for attending the Workshop which he hoped would be successful and regretted that commitments for the SCA in Siwa Oasis would prevent him staying for the whole day.

Presentation

Dr Spencer gave a short illustrated talk on the work of the EES Delta Survey, describing the origins of the project, its adoption by the Egypt Exploration Society, and its recent approval by the British Academy as one of the Academy's 'Research Projects'. He described the surveys, and limited fieldwork, which it has been able to carry out, often with the assistance of team members from non-EES expeditions and encouraged other expeditions to investigate sites in the neighbourhood of their work and submit brief descriptions to be added to the EES website.

Dr Spencer said there are three levels to the work:

1. Identify sites to be visited from old maps or publications and visit them to see if they still exist, estimate their size and make notes on the nature of the mound and any surface features or finds.
2. Carry out a more detailed survey, mapping the site, undertaking geophysical survey if the site is suitable, and recording surface features.
3. Undertake limited, targeted excavation to identify and date structures and features noted during the survey.

Dr Spencer noted that there are now 750 sites included in the EES database and, with limited resources, it is impossible to investigate all of them. Priorities would need to be established and a campaign to assess Delta sites, similar to the UNESCO campaign to save the Nubian monuments, might be necessary.

Discussion

Professor Manfred Bietak commended the work and achievements to date of the EES Delta Survey. He had noted on Dr Spencer's map that there are some areas which have a low density of sites. In the central Delta this was probably due to its early development but in the area south of Tell el-Balamun, he suggested this might be the location of an ancient lagoon.

Dr Paul Sinclair drew attention to the potential for the use of different investigative, mapping and analytical techniques which his team at Kom Khawalid has been employing in the area around Lake Burullus. Satellite image analysis can now distinguish between ancient sites and modern villages. He felt that an international campaign, as suggested by Dr Spencer, along the lines of the Nubian campaign would be too limited in its aims and drew attention to the IHOPE project (Integrated History of Peoples on Earth - www.aimes.ucar.edu/ihope/) within which study of the Nile Delta in a socio-economic context could be included. Professor Bietak noted the importance of studying the whole environment in antiquity – the Nile branches, lagoons, drainage, irrigation, flood levels, land exploitation, etc. Dr Joanne Rowland added that in discussions she had held with Dr David Jeffreys, he had also urged that the Delta should be studied holistically and related to geophysical investigations at its apex which was much further south in antiquity.

Dr Penny Wilson said that the Delta Survey had so far been all-inclusive to make sure that nothing was missed, but it was perhaps time to develop specific projects based on, for example, groupings around Nile branches. In reply to Dr Wilson who asked if it would be possible to access the reports of SCA Inspectors, Dr Mohammed Abdel Maksoud explained that SCA Inspectors are usually asked to carry out very short (10 days to 2 weeks) investigations of areas when building or development projects are planned. The results are often not made in any meaningful archaeological context and include material from only a small area. Dr Maksoud also noted that many young SCA Inspectors have not been fully trained and that they need encouragement and help to publish their results. They do not at present get the experience of working systematically on larger projects. He also recommended that the SCA should establish a 'geomagnetic section' as the use of private companies for geophysical work in Egypt is very expensive. In reply to Dr Ulrich Hartung who suggested that students at Delta universities should be encouraged to participate in fieldwork, Dr Maksoud said that few students receive any training in fieldwork techniques and he welcomed the various 'training schools' that were now being run by international teams. However, much more needed to be done.

Dr Maksoud described the current situation in the Delta with the rise in subsoil water-levels and threats from development, and the steps the SCA is taking to protect sites. He expressed the view that an international effort is needed to save the Delta sites with a programme for future work; excavation is not always necessary and good, informative results have been achieved at sites such as Tell el-Daba and Tell el-Balamun, by geophysical scanning, and he also noted that not all sites can be, or should be, excavated. He added that sites in north Sinai (which had been part of the Delta in antiquity) were similarly under threat. Dr Maksoud reiterated the view, expressed earlier by Mr Sabri Abdel Aziz, that it is important to educate the local population and involve them in site protection. He pointed out that applications to build on, or develop, SCA-owned land can be refused but the SCA does not own all ancient sites and does not have the financial resources to purchase every site identified as containing antiquities. In reply to Dr Sabri Hassanein, Dr Maksoud said that the SCA does not own all of the site at Quesna, from which sand has been removed. He felt that the police should take on greater responsibility for the protection and guarding of ancient sites and antiquities' magazines.

Dr Frands Herschend stressed the need for a strategy for recording sites in the Delta and said that it would be useful to know where the SCA had already worked so that archaeologists could assess what had already been done and what still needs to be done. He recommended introducing 'random sampling' with a group of 70 sites. This could also be applied to sites which show particular characteristics, such as evidence for glass production.

While approving the need for raising awareness of ancient sites among the local people, several speakers

drew attention to the inherent conflict between the needs of the growing population in the Delta and the interests of archaeologists and it was recognised that compromises will have to be made. Other points made during the discussion were that not all ancient mounds were major cities – many were smaller towns or villages and we need to investigate their relationships to each other, that sites were founded at widely differing dates and so were not all contemporaneous, and that the locations of mounds can indicate the lines of ancient Nile branches.

Dr Spencer invited Professor Manfred Bietak to summarise the morning session

Summary

Professor Bietak thanked all those who had participated in the most interesting discussion. Mr Sabri Abdel Aziz Khater had described in his introductory talk the problems faced by the SCA in protecting sites against the rising water-table, encroachment and development. While welcoming the SCA policy of encouraging work in the Delta rather than in Upper Egypt, this was not without its problems, since many Egyptologists were not trained in the fieldwork techniques necessary to understand and interpret Delta sites. If colleagues are more experienced in copying Theban tombs, they should be encouraged to continue, rather than move to the Delta where their skills and knowledge would be inappropriate. Professor Bietak commended the work being undertaken by the EAIS in preparation of the 'Atlas' and that of the EES Delta Survey, and highlighted one aspect of 'rescue archaeology' in the Delta which had not yet been mentioned: when archaeologists expect to excavate a site before development, they might wish to spend several years on the work while the man wishing to build a house wants the work to be finished quickly and is not willing to wait for a proper scientific investigation of the area. This reinforced comments made by several speakers for the need to educate the local population in the importance of all antiquities' sites. He would also urge the construction of good site museums to raise the awareness of local people, especially children.

Professor Bietak emphasised how important it is to train both SCA Inspectors and young Egyptologists in survey and excavation techniques appropriate for work in the Delta. There is much that can be learned from a scientific investigation of sites and the ancient environment, to fill in the gaps in our knowledge which has been mainly acquired from ancient texts. However, excavation is of no value unless the work is published and he estimated that 50%, maybe more, of excavations in Egypt remain unpublished. Without publication, the work gets forgotten and the information acquired is lost. He also stressed the need to train more ceramicists and raise awareness that an archaeological context can be read from pottery as much as it can from texts.

Attention should also be paid not just to the visible mounds and known sites but to those areas where there are blanks on the map which might indicate ancient lagoons or Nile branches. These can also be seen in settlement patterns on old maps and satellite images. Archaeologists need to check the 'empty' areas to see if they really were unoccupied in antiquity – ancient sites may still be there under the cultivation. In this regard old aerial photographs can be very useful, showing crop marks, and providing a useful supplement to modern satellite images.

Professor Bietak stressed the need to understand the whole ancient environment which binds together the still-visible sites. This will enable us to reconstruct the ancient Delta and Mediterranean coastline, and give us a better understanding of the history of the Delta. Even if sites have been destroyed, their locations can still today indicate the positions of the ancient Nile branches, but this information is gradually being lost and in a few decades will be gone if not recorded soon. In conclusion, Professor Bietak said that it had been a most stimulating morning and he thanked the EES for the initiative for the Workshop and the SCA for its participation and its valuable work.

Afternoon Session

Introduction

The first afternoon session started with a short discussion of the 'blank' areas on the Delta Survey plot of sites. Dr Mohammed Abdel Maksoud then introduced Dr Joanne Rowland who gave a brief presentation on the work of the EES Minufiyeh Survey.

Presentation

Dr Rowland described the aim of the project - to undertake mini case-studies in the central Delta and at the desert edges by visiting sites, field-walking, talking to local SCA officials and villagers, and examining aerial and satellite photography. She made the point that not all the 'sites' visited are settlements - some are just the findspots of, for example, pottery which may have been transported from its original location. Dr Rowland gave examples of different kinds of sites and some of the surface finds, such as ceramics, glass and, in the case of Kom el-Ahmar (Minuf) fragments of granite *naoi*. She moved on to describe the various investigative techniques used by the expedition, including geophysical surveys; by using magnetometers, ground penetrating radar and resistance tomography. The team also made use of drill-coring, using both hand auger and mechanical drills. These techniques enable fieldworkers to build up a picture of the ancient environment of a site.

Discussion

Dr Maksoud thanked Dr Rowland for her presentation and for the work undertaken by her team. He emphasised that it is important to talk to local people before the start of work so that they understand why archaeologists are interested in their villages and land and do not see their presence as any kind of threat.

There was some discussion as to the value of drill-coring for dating historic levels since the sherds retrieved are so small. Several speakers felt that, although it is laborious and more time-consuming, taking adjacent cores with several drills of different diameters produced the best and most reliable results. The value of coring for tracing Nile channels over time was emphasised. Dr Penny Wilson pointed out that there are two aspects to drill-coring which give results on differing scales: the first is 'geological' and the second 'human'. Cores which give results on a geological timescale can then have interpolated into their sequence the cores on a 'human' scale. If a site is heavily stratified then it is necessary to look at both aspects at the same time. In this way it is possible to build up patterns of dynamics of lifestyles. Professor Fekri Hassan reminded colleagues that the 'base' of the drill core is not necessarily the base of the archaeological deposits. He also stressed the need to correlate findings with those obtained from radio-carbon dating and for teams to include, or at least have access to, experienced sedimentologists and/or geologists. He would encourage geologists to provide training for archaeologists to help them better understand the results of their work. Professor Hassan noted that the two 'aspects' noted by Dr Wilson were differences in scale only - geologists and archaeologists should work closely together.

Dr Paul Sinclair advocated the use in Egypt of phosphate analysis which had given good results elsewhere in Africa. Professor Hassan noted that at Naqada it had shown the extent of the site and that it had been truncated. He did feel, however, that the technique needed to be used with great care.

Dr Rowland asked if it would be helpful if all teams making site visits had standard recording sheets to ensure that everyone is recording the same kinds of data in the same way. Professor Hassan said his team in the Fayum had such sheets which he would be happy to share with other projects.

Dr Jeffrey Spencer noted that before any scientific techniques can be used, sites need to be identified, located and mapped. He also pointed out that many research facilities are now available in Egypt and that a greater use should be made of locally-available equipment and expertise.

In conclusion Dr Maksoud stressed the need for an international effort to assess the threats to Delta sites and record as many as possible before they are destroyed.

Final Session

Introduction

Dr Spencer introduced Dr Penny Wilson who gave a presentation on the future of the Delta Survey.

Presentation

Dr Wilson said that she would look at the problems of the Delta in a more conceptual and imaginative way. She drew attention to four different perspectives which she hoped would inform discussion;

1. archaeology - to review and clarify future methodologies
2. heritage - to assess the likelihood of cultural heritage values
3. negative - to look at worst-case scenarios
4. positive - to look at best case scenarios and future research questions.

Discussion so far had centred on those sites where there were visible remains, even if very low, above ground. These could be investigated by the techniques discussed in the previous session. It is also possible now to carry out 'virtual excavation' by building up scans using ground penetrating radar (GPR), as she illustrated with reference to a site in Syria. In the 'worst-case' scenario, recent predictions at the Copenhagen Climate Change Congress (see: <http://climatecongress.ku.dk/>) show that the Mediterranean sea level could rise within 20 years to a height which will cause severe disruption and destruction in the Nile Delta. This would mean that archaeologists have only 20 years to record and rescue Delta sites, the investigation of which would inevitably have a low priority if sea levels should rise to such an extent.

In conclusion, Dr Wilson posed some questions. If data is to be collected, we need to decide not only 'how' but also 'why'. What information do we want to acquire and what use will we make of it? How can sites be developed, if indeed they should be, to serve the interests of local communities, archaeologists and, perhaps, the needs of the 'heritage' sector?

Discussion

Dr Qad el-Gady noted that geophysical scanning was now less expensive and could be undertaken by Egyptian teams who might be seen as less of a threat to the local population. In reply Dr Maksoud said that, although costs had come down, it was still too expensive for the SCA to hire scanning equipment and he felt that this would be better addressed by the SCA having its own scanning department, rather than hiring private companies to do the work. He stressed that it is preferable for those doing the scanning to have some knowledge of archaeology so that they can understand what they are finding and why it is important. Mr Ashraf Senussi made the point that if archaeologists or geophysicists identify a previously unknown site, its location would become known to those who might damage or rob it. Dr Spencer noted the need, therefore, for greater protection of sites. Dr Irene Forstner-Müller pointed out that GPR often does not work well on Egyptian settlement sites because of the high water levels and Dr el-Gady recommended using electromagnetic induction on sites where conductivity is a problem.

Professor Fekri Hassan said that Dr Wilson's talk had brought together key issues. She had raised the matter of 'cultural heritage' and also the dangers threatening the Delta. Even if sea levels did not rise as quickly as predicted in Copenhagen, the population of Egypt will double within the next 20 years, putting even more strain on its resources and the demands to release land for development and agriculture. The danger of looting, which had been mentioned, is already present. She had asked 'why' we wished to collect data and a mere desire of knowledge is unlikely to attract funding or political support. A better approach would be to focus on the preservation and protection of sites as part of the social development of the local population.

For this an international Committee would be necessary to draw up a general plan for the future, identify gaps in our knowledge and agree objectives and methodologies based on an interdisciplinary approach. To get funding it will be necessary to show a wider benefit than just finding out 'what is there'. This view was supported by Dr Sinclair.

Discussion then concentrated on the 'heritage' issue raised by Dr Wilson and the distinct lack of appeal to tourists of most Delta sites. One solution would be to build 'visitor centres' at sites and Dr Frands Herschend suggested that, at Kom Khawalid for example, the ancient glass production factory could be reconstructed, providing work for local craftsmen and giving visitors something of interest to see and study.

Professor Manfred Bietak stressed the need for strategies to preserve the most important sites, not just to excavate a site, 'finish' it and then hand it over for development. Some sites should not be excavated to preserve them for investigation with future technologies. One strategy should be to identify the ancient Nile Branches.

Conclusion

Dr Maksoud said that several speakers had urged the need for an international Committee to assess priorities and identify those sites most in need of 'rescue'. He would, therefore, propose to Dr Zahi Hawass that the SCA should establish such a Committee to consist of about six persons. He would recommend that Professor Bietak, Dr Jeffrey Spencer and Professor Feyza Heikal be among its members. Dr Maksoud hoped that this Workshop would be the beginning, and not the end of discussion on the Delta.

Dr Jeffrey Spencer thanked Dr Maksoud for his contribution to the day and thanked all those present for participating in the wide-ranging discussion. He hoped that discussion would continue on a new area to be set up on the EES website (www.ees.ac.uk) which was currently being redesigned and would be relaunched in the next few months. In the meantime the EES would set up an e-mail group so that information can be exchanged on a regular basis. Dr Spencer introduced the EES Chair, Dr Ian Shaw, to draw the Workshop to a close.

Dr Shaw said that he wouldn't attempt to summarise the discussions but he did think there are grounds for optimism for the future. The EES has in recent years to some extent returned to its roots as its earliest work was in the Delta. The issues are now, however, on a much higher level with the question of investigating sites, not just for knowledge, but also as part of the cultural heritage of Egypt. As several speakers had mentioned, we need to pursue this integrated approach.

Dr Shaw expressed his gratitude to Dr Zahi Hawass for agreeing that the Workshop could be a joint SCA/EES event and he thanked Mr Sabri Abdel Aziz Khater and Dr Mohammed Abdel Maksoud for their contributions on behalf of the SCA. The Workshop had been an initiative of Drs Penny Wilson and Joanne Rowland and he thanked them and Dr Jeffrey Spencer for their interesting presentations and their contributions to the discussions. The Workshop had been organised by Dr Patricia Spencer (in London) and Mrs Faten Abdel Halim Saleh (in Cairo), with the help on the previous day of Mr Chris Naunton and Dr Rowland. To all, Dr Shaw expressed his thanks. He was also grateful to the British Council for the use of their rooms and to the staff of Beano's for providing the refreshments and lunch.

In conclusion Dr Shaw said that he had, personally, found this to be an interesting and stimulating day and he hoped those present would go forward to pool their ideas and ensure that Delta sites are protected for future generations.