The Sudan Archaeological Research Society; the first 25 years

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Since its foundation in 1991 the Sudan Archaeological Research Society has made a significant contribution to the study of Sudan's archaeology and heritage and to publicising them through lectures, publications and its website. Much has changed in Sudan since 1991, the most fundamental being the division of the country into the Republic of Sudan and the Republic of South Sudan in 2011. In some parts of the Sudans peaceful conditions prevail offering the possibility of fieldwork while other areas have for extended periods become closed to archaeological and anthropological activities. Although the interests of the Society cover the whole of the two Sudans it has not been directly involved in organising or funding projects in the south or west. Its activities mirror the focus of research particularly along the Nile Valley but also to a lesser extent in the adjacent desert areas and in Eastern Sudan.

The other major change has been the result of widespread development particularly of the transport infrastructure. In 1991 on the east bank of the river the tarmac road extended for a distance of 40km to the north, on the west bank it did not extend outside Omdurman. The Nile could be crossed by bridge in Khartoum but for the next 1,845km along the river's course the only way to get across was by ferry (Plates 1 and 2). Travelling north was a real expedition, the journey to Dongola for example was a 500km trip across the desert along rough tracks, through thick sand and across gravel



Plate 1. A car ferry on the Nile, 1930s style; an image from the SARS Kirwan Archive (KIR P062.02).



Plate 2. A ferry crossing the Nile to Merowe in 2003.

plains (Plate 3). Sign posts were non-existent. The route was once described thus – "coming out of Omdurman head just to the left of the hills you see to the north west, drive for about 5 hours then make sure not to take the track veering off to the right. After another 6 hours going more or less north turn sharply to the east and you will hit the river at Dongola". Fuel could be obtained in Khartoum – the next fuel stop was in Dongola. Crossing the river was a time consuming



Plate 3. The Khartoum to Dongola bus on the 'main road' across the Bayuda in 1983.

business – a four hour wait to cross at Dongola or Merowe was not unusual. Some routes were particularly hazardous, among them that from Dongola to Kareima along the 190km Sikkat el-Maheila, known as the Road of Death – an official sign at the Dongola end bore a skull and crossbones (Plate 4). Now everything has changed. All the major cities in north and central Sudan, and elsewhere, are linked by good quality tarmac highways and the Nile north of Khartoum can be crossed effortlessly on excellent bridges at Halfaya, Shendi, ed-Damer, Merowe, ed-Debba and Dongola. Fuel stations are common although one still has to be wary – they may be over 150km apart!

Life is also a lot easier. In the early 1990s making a phone call from Dongola to Khartoum, let alone internationally, was





Plate 4. Warning sign at the Dongola end of the Sikkat el-Maheila the Road of Death—which cuts across the desert to Kareima (photo: I. Welsby Sjöström).

frequently impossible – now everyone has a mobile phone and internet is widely available. The building of the Merowe Dam in particular has 'flooded' riverine Sudan at least to the north of Khartoum with electricity. Generators are largely a thing of the past and the availability of reliable electricity is a particular benefit to research as more and more equipment relies on the regular charging of batteries for laptops, total stations and cameras. The improved road network has also made a much wider range of produce available in the local shops and markets.

One thing that has remained unchanged over the last 25 years is the warm welcome and assistance in every way offered to us by the staff of the National Corporation for Antiquities and Museums under its Chairman Prof. Ahmed Mohammed Ali el-Hakem and Director Generals, Osama Abdel Rahman Elnur, Mr Hassan Hussein Idriss and the present incumbent, Dr Abdelrahman Ali Mohammed. The Society has worked closely with NCAM to achieve its core aims.

SARS in Sudan

Right from the outset the Society made a significant impact to fieldwork in Sudan following its purchase of a Landrover County 110 (Plate 5) which was made available for use during the excavations of the British Institute in Eastern Africa (BIEA) at Soba East on the Blue Nile in December 1992.



Plate 5. The Landrover 110 County in the Libyan Desert south of Soleb.

On the completion of that project, to which the Society had made a financial contribution, at the beginning of January 1993 the first SARS project was initiated in the Northern Dongola Reach and the Society has been active in Sudan every winter since then apart from one. In the winter of 1998 the team was unable to go into the field as a result of political problems which resulted in diplomatic relations being broken off. This made it impossible to obtain insurance for the team and the fieldwork, therefore, had to be postponed.

The projects of SARS in Sudan all have resulted from the Society's close cooperation with NCAM. While on occasion the Society has undertaken projects principally driven by research questions on others activities have been focussed on rescue archaeology at the request of NCAM. In fact all archaeological sites in Sudan are potentially at threat from modern development and/or natural processes and, therefore, rescue is a component of all projects.

Rescue archaeology

The main threats to archaeology over the last 25 years have come from massive infrastructure projects – roads and dams – although the expansion of settlements and farming activities are also significant. A very new phenomenon is the current gold rush (Plate 6).



Plate 6. Gold miners' encampment at Umm Nabarti (Nabardi), a site mined during the New Kingdom and by an Anglo-Sudanese company in the early 20th century when approximately 250,000 ounces of gold were extracted.

Road archaeology

The Khartoum to Athara Road – In the early 1990s the Sudan Government began the construction of the Challenge Road which was to link Khartoum to the major urban centres of Shendi, ed-Damer and Athara, a total distance of about 280km. A SARS team accepted responsibility for the survey of the route for the 90km stretch ending at Athara. Two seasons of survey along with small scale excavations directed by Michael Mallinson were undertaken in 1993 and 1994 (Mallinson and Smith forth.; Mallinson et al. 1996). During the course of this work only one major site was threatened, a hitherto unknown cemetery of later Kushite to medieval Christian date at Gabati (Plate 7) which was the focus of



Plate 7. A well preserved Post-Meroitic burial excavated at Gabati in 1994 prior to its destruction by the Challenge Road (photo: D. Edwards).

a single season of excavation directed by David Edwards (Edwards 1998; Judd 2012).

The Omdurman to Gabolab Road - Following the completion of the road to Atbara, road building activities were shifted to the Bayuda with the construction of the Shiryan esh-Shimaliya between Omdurman and Multaga, a distance of approximately 300km. The SARS team directed by Michael Mallinson and Laurence Smith surveyed the whole line of the road and undertook limited excavations (Mallinson 1997). No major sites were impacted by the road building.

Dam archaeology

The roads noted above impacted on a linear strip of land a few hundred metres wide, although additional destruction is caused by road construction in less predictable ways by the location of the access routes, construction camps and quarries. One such quarry, associated with the Dongola to Kareima road, very narrowly missed destroying the Kushite cemetery at Kawa several years ago. The destruction caused by dams is on an altogether different scale and has had an immense impact on the activities of SARS.

The Merowe Dam - A dam at the Fourth Cataract was proposed in the 1940s but was abandoned when the decision was taken to build the Aswan High Dam. In the 1970s the Sudan Government resuscitated the project which appeared to pose an imminent threat in the early 1990s. Although NCAM appealed to the international community to work in the threatened area of the Nile Valley – 170km in length – the fluctuating credibility of the dam going ahead resulted in little enthusiasm being shown for this. In 1996 the Gdańsk Archaeological Museum Expedition began work in a concession on the right bank. For the winter of 1998-9 SARS applied for a concession on the left bank although the threat of the dam being built at that time seemed very low. The Society however reasoned that it would do a single season and then, should the threat resurface, it would be in an excellent position to rapidly respond, having a knowledge of the local conditions, logistics required and archaeology to be expected. As noted above, the season had to be postponed but a team was in the field from October to December 1999. When the go-ahead for the dam was finally given in 2002 SARS returned to its concession and fielded multiple teams there until 2007 (Plate 8). The dam was inaugurated in February 2008 and the reservoir was largely full by the end of that year. A vast amount of work was achieved by the Society's field teams with over 2000 sites of all periods being discovered. This has generated a very considerable post-excavation project which the Society, with its very limited funds, is still wrestling with.¹



Plate 8. Excavating a crevice grave in the Society's concession at the Fourth Cataract in the winter of 2006-2007.

The Shereik Dam – The Merowe Dam was only the first of many projected by the Dams Implementation Unit. Responsibility for archaeological activities in advance of the heightening of the Rosseires Dam and of the construction of the two dams on the Siteit river was shouldered by NCAM. With the Fifth Cataract and Kajbar Dams the international community were again invited to assist. SARS took a large concession in the Fifth Cataract but, owing to local opposition to all things associated with the dams, was unable to do significant work in the area (Welsby 2013). It still holds the concession and will return to the area as and when the situation changes.

Research

The Northern Dongola Reach Survey was the first SARS project to be undertaken, the BIEA team from Soba moving on, in January 1993, to become the first SARS team. Following consultation with NCAM, it was decided to undertake what was initially envisaged as a four season campaign of survey in the Northern Dongola Reach of the Nile on the east bank filling the gap between the concession of the Royal Ontario Museum in the south and that of the Section Française de la Direction des Antiquités du Soudan to the north. During the survey over 450 sites were discovered many of them dating to the Kerma period and located along the banks of long defunct channels of the Nile. In collaboration with geomor-

¹ For both published and draft reports on this project visit http://www.sudarchrs.org.uk/fieldwork/fieldwork-merowe-dam-salvage/



phologists from the Universities of Manchester and Aberystwyth it was possible to build up a detailed picture of the palaeohydrology and climatic change in the region and examine in detail the human response to the changing environment. The survey was followed by a single season of excavation within two cemeteries of the Kerma period, sites O16 and P37, within a well field at site P1 and of a large store building at site P4 (Plate 9) (Welsby 2001).

This work has been followed by detailed excavations at Kawa, the main urban centre in the region during the Pharaonic and Kushite periods. Fol-

lowing on from the excavations of the Oxford Excavation Committee in 1929-31 and 1935-6 work has taken place in a number of areas across the town with differing functions – the gateway into the temenos, a store building with palatial



Plate 10. One of the six dressed sandstone pyramids excavated within the Society's concession at Kawa in recent years.

the dramatic quartz outcrop (Plate 11) on which are royal inscriptions of the pharaohs Thutmose I and III, of Ramesses II and of many members of the court (Davies 2001; 2003; 2008; Davies and Welsby Sjöström 1998; 1998-2002).

This British Museum/SARS project also investigated the environs with a regional survey conducted by Isabella Welsby Sjöström and trial excavations in the mud-brick fort by the Nile, the cemetery at the Hagr and in another cemetery (KRG3) a little to the north (Davies and Welsby Sjöström 1998; Welsby Sjöström 2001; 2008; 2014). The project has since been expanded to encompass a much wider ranging study of Egyptian inscriptions at Tombos, Jebel Dosha, Dal and Akasha as well as along the Korosko Road (Davies 2004; 2014). It has been accompanied by excavations at Jebel Dosha of the shrine and an analysis



Plate 9. The store building dating to the Kerma Classique (1750-1450 BC) at site P4 in the SARS Northern Dongola Reach concession.

apartments above, houses, a shrine and an industrial complex. Meanwhile in the cemetery many graves have been excavated, some marked by substantial dressed stone pyramids (Plate 10), a type of monument only found hitherto in a royal context and in the elite Western Cemetery at Meroe. Excavations have also been undertaken at site H29, a cemetery of the *Kerma Ancien* period (c. 2400-2050 BC) almost 40km to the south of Kawa, all 98 graves being investigated (Welsby 2012). Since 2013 the work at Kawa has been financed by the Qatar-Sudan Archaeological Project along with excavations of the Kerma, New Kingdom and early Kushite site at H25 under the auspices of the British Museum.²

The Egyptian Epigraphy Project began at Kurgus in 1998 and was directed by the Society's honorary chairman, Vivian Davies. The main focus was on the Hagr el-Merwa,

² For a list of references to this work visit http://www.sudarchrs.org.uk/fieldwork/fieldwork-kawa-excavation-project/



Plate 11. The quartz outcrop at Kurgus on which the inscriptions of pharaohs Thutmose I and III and Ramesses II are carved.

It was claimed as the southern boundary of the Egyptian Empire in the New Kingdom.

of the decorative program within it, along with a study of the reliefs on the cliff face (see Davies et al., this volume).

In the wake of the Egyptian Epigraphy Projects' activities at Kurgus SARS has now focused its field activities in the area undertaking extensive excavations within the fort and in cemetery KRG3 (Ginns 2015; Haddow 2014; Nicholas 2014). This is planned initially as a five season project. In the three seasons to date much of the defensive circuit of the fort comprising walls 5m thick, boldly projecting circular angle towers (Plate 12) and rectangular interval towers have been uncovered. Excavations have now moved to the fort interior



Plate 12. The massive projecting south-east angle tower under excavation in 2015 at Kurgus (photo: A. Ginns).

in an attempt to obtain an overall plan of the densely occupied interior where stratigraphy survives to a depth of well over 2m. The latest phase of use of the site was for burials in the later Christian period. The cemetery, covering an area of approximately 2000m², contains over 300 tomb monuments of various types, both tumuli and box graves. Excavations so far have revealed evidence for use in the Post-Meroitic and Christian periods but the discovery of Kerma period ceramics and Neolithic material indicates a much longer period of occupation of the hill on which the cemetery is located.

Much smaller scale projects have taken place, again in collaboration with the British Museum at Jebel Umm Rowag and between Wadi Halfa and Kerma. Jebel Umm Rowag is a prominent conical hill rising to an elevation of 454m above sea level, dominating the Nile Valley to the north east of Abri. On its summit the chance discovery of fine examples of Kushite rock art and extensive scatters of early Christian pottery along with stone shelters led to a two-day survey of the hill top with the recovery of the ceramic material (Plate 13). It appears that the hilltop was used for ritual activities during these two periods, in the latter of which liquids were presumably consumed in some quantity and the empty vessels where then smashed – conjoining sherds were found up to 50m apart down the steep rocky slopes (Welsby and Welsby Sjöström 2006).

The other survey focussed on what might be considered the largest archaeological site in the Sudans, the railway begun



Plate 13. Surveying the hilltop of Jebel Umm Rowag in February 2001.

in 1875 and finally completed in 1897 between Wadi Halfa and Kerma, over a distance of 324km. This, the first industrial archaeology project in the region undertook a photographic survey of the rail bed and its associated installations, of the construction camps occupied by its builders and of the forts along its course dating from the Gordon Relief Expedition of 1884-5 and the Dongola Campaign of 1896. Much of the railway was abandoned in 1904; it was totally defunct by 1910 and this became officially an 'antiquity' in 2010 (Welsby 2011).

Grants to other projects

Over the years the Society has supported with small grants a wide range of projects particularly those directed by Sudanese colleagues along the White Nile, at Akkad, at Berber and elsewhere.

Donation of material to the British Museum

Under the provisions of the Antiquities Ordinance of 1952 there was a division of finds at the end of each project. As a result of this, through the generosity of the National Corporation for Antiquities and Museum, many finds, but also much sample material, human and animal skeletal remains, were gifted to the Society and passed on to the British Museum for permanent curation. The 1999 Antiquities Ordinance suspended the automatic division of finds but this was re-instated specifically for those missions who participated in the Merowe Dam Archaeological Salvage project. As a result SARS was again able to pass on material to the British Museum from the Fourth Cataract, most notably a very large collection of human skeletal and mummified remains which have immense research potential. The material from the SARS surveys and excavations have allowed the display of Sudanese and Nubian material to be much enhanced in the British Museum's Sudan, Egypt and Nubia gallery, giving prominence to the cultures of the ancient and more recent Sudan.

SARS in the UK

Membership - The Society now has a membership of



consistently over 300, drawn from around the world, as far afield as Australia, Japan, Canada, the USA and Sudan. Members include senior academics in the field of Sudanese and Nubian studies, among them a number of archaeologists who have excavated in Sudan for over three decades, as well as lay members who have a keen but general interest in the region. Amongst them are the Patrons of the Society whose generous annual donations greatly assist the Society in financing its activities.

In order to highlight the importance of Sudan's archaeology and heritage the Society organises an annual one-day international colloquium hosted by the Department of Ancient Egypt and Sudan in the British Museum. This provides an important forum for reporting upon some of the latest fieldwork and other research in the region. Each colloquium leaves a lasting legacy with the publication of the papers later in the year. Coinciding with the Annual General Meeting, the Society invites a guest speaker of internationally renown to deliver a lecture, which has, since the passing of our first Honorary President Sir Laurence Kirwan in 1999, been named the Kirwan Memorial Lecture. Amongst the speakers have been such luminaries as Professor Peter Shinnie, Professor William Y. Adams, Professor Fred Wendorf and Professor Charles Bonnet.

The Archives and Library of the Society are housed in its office within the Department of Ancient Egypt and Sudan at the British Museum. The core of the archives consists of the record sheets, photographs and plans from the projects of the Society as well as those from the BIEA's work at Soba East. Also in the archives is a substantial collection of material from the fieldwork of Professor W. Y. Adams. There is also an extremely valuable collection of photographs, plans and elevations of buildings at Suakin made when the town's buildings were in a much better condition than today, by Jean-Pierre Greenlaw (Figure 1). Photographic collections come from a number of individuals among them Charles Daniels, Brian Haycock and Laurence Kirwan (e. g. Plate 1). Until very recently the Library holdings were mainly composed of books purchased from Sir Laurence Kirwan amplified by gifts, from amongst others, Harry James, one-time Keeper of the British Museum's Department of Egyptian Antiquities. In the very near future the library is set to grow dramatically. Our current Honorary President Professor William Y. Adams has very generously gifted his library on Sudan and Nubia to the Society, one of the most comprehensive such libraries in existence. In combination with some of Larry Kirwan's books and the ever expanding archive this will provide an invaluable research tool for anyone interested in the region's rich past.

SARS on the international scene

In order for the Society to disseminate information internationally it has produced an annual newsletter since its inception which started off as a single sheet of paper but soon became a more substantial publication containing articles of

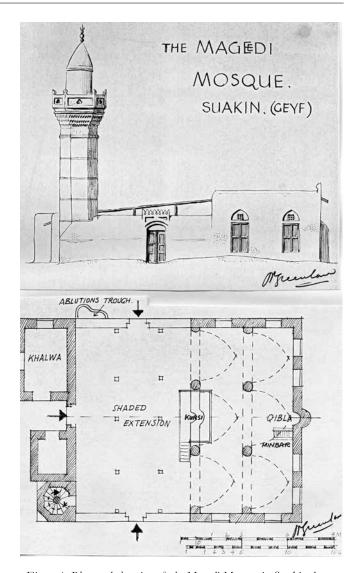


Figure 1. Plan and elevation of the Magedi Mosque in Suakin drawn by J. P. Greenlaw (SARS Greenlaw Archive GRE E071.02).

academic significance. In 1997 the newsletter was replaced by Sudan & Nubia, an annual bulletin. This rapidly became one of the premier journals for Sudan studies. The core of each issue is papers derived from the previous years annual lecture, now the Kirwan Memorial Lecture, and papers delivered to the annual colloquium. The quality of production - it has been full colour since 2011 - and more particularly the speed of publication make it an extremely attractive and useful vehicle for disseminating the results of recent and on occasion not so recent work globally. A similar role is played by the website (http://www.sudarchrs.org.uk) which now hosts alongside general Society matters, digital copies of all articles from the newsletter and Sudan & Nubia available for free download (Sudan & Nubia articles only from two years after the publication of the hard copy). The website also hosts reports on the Society's activities at the Fourth Cataract and at Kawa. These reports will ultimately form a part of the monograph series devoted to these projects but cannot yet be published until complementary sections of the project are also ready for publication. Rather than allow

these reports to languish in the archive for several years the draft versions are made available on line so that colleagues can see some of the basic results at this stage, albeit largely devoid of interpretation.

Alongside its annual bulletin, the Society also has a monograph series comprising to date 20 volumes (for details http://www.sudarchrs.org.uk/resources/publications/fieldwork-publications/). Several of these are the final reports on the Society's own surveys and excavations. The Society has also facilitated the publication of extensive work by W. Y. Adams in Sudan conducted as a part of the rescue project associated with the Aswan High Dam in particular the Sudan Antiquities Service's survey on the west bank in the region of the Second Cataract (one volume authored by Professor Hans-Åke Nordström), the excavations at Meinarti, and later those at Kulubnarti. The Society also published the results of the joint Italian-Sudanese excavations at Hillat el-Arab authored by Professor Irene Vincentelli and her colleagues.

The Society has amongst its membership many who are passionate about Sudan yet are not archaeologists or in related disciplines, having followed very different career paths. For many years tours to visit the archaeological sites in northern and Central Sudan have been organised to guide some of these lay members to those places where the Society has worked along with many of the other famous archaeological remains, as well as some very obscure sites. One such tour was more in the nature of an exploratory expedition seeking to locate some sites whose presence are alluded to in the literature but never visited hitherto by archaeologists (Plate 14) among them the quarry near Bayuda Wells containing granite column shafts and the church marked on the 1:250,000 Sudan

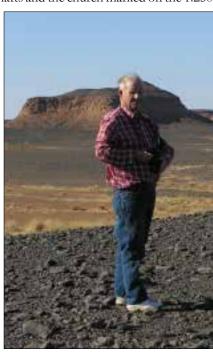


Plate 14. The Society's Honorary President, Professor William Y. Adams, in the Bayuda Desert on the exploratory tour, 2005.

Survey maps to the west of Tamtam. This met with some successes and some failures! On the occasion of the 20th anniversary of the Society a tour for SARS members was led by the Honorary Chairman and Secretary (Plate 15) and the 25th anniversary tour is planned in mid November to early December 2016.



Plate 15. The Society's 20th anniversary tour visiting Jebel Dosha in the company of the Honorary Chairman, Vivian Davies, 2011.

The Republic of Sudan offers vast potential for future archaeological activities along with ethnographic studies, the Republic of South Sudan even more so in light of the very limited research undertaken there previously. The cultures which flourished in these countries in the past are of great intrinsic interest and include among them the earliest urban civilisation in Sub-Saharan Africa. In the northern part of the Republic of Sudan clear links with Egypt and the cultures of the wider Mediterranean world and the Middle East are clearly visible. One of the great unknowns is the links between that region and the upper Nile basin. It is hoped that in the future the Society will continue to thrive and be in a position to extend its activities from the Middle Nile out into the deserts, the savannah and very little known areas further to the south, including the territories lying within the Republic of South Sudan.

None of the activities of the Society would have been possible without the logistic and financial support of the British Museum and assistance of the staff in the Department of Ancient Egypt and Sudan. This support has allowed the Society to devote all its funds to promoting the archaeology, heritage and ethnography of Sudan. It has also enabled the Society to organise its lectures and colloquia each year and to offer receptions usually in the Sudan, Egypt and Nubia gallery where much informal but important discussions have been had. As well as grants to the Society over the years from the British Museum, core funding has been provided throughout by the Institute for Bioarchaeology the importance of which cannot be overstressed. For individual projects and excavations the Society has received support from many institutions both in the UK and abroad as well as donations made by the Society's patrons, some of whom have supported its activities



for many years. One of our founding members and long-time patron, Mrs Rikki Breem, who died recently, made generous provision for the Society in her will.

A small group of volunteers play a number of key roles in the Society, in the SARS office dealing with membership issues, organising the Library and Archive and mailing out *Sudan & Nubia*. Other volunteers have over the years offered their expertise as Honorary Treasurers and Independent Eaxminer which are essential to the running of the Society as a registered charity. Yet others, as members of the Committee, give up of their time to consider and formulate the Society's aims and activities. Finally a great debt of gratitude must be extended to the many tens of archaeologists and related specialists who, usually for very little or no financial remuneration, have worked hard in often trying conditions to further the Society's fieldwork – its core activity. Team members, like the membership itself, have come from around the world and not least from Sudan itself.

The Society's achievements rest on a wide range of individuals and institutions whose combined support has allowed it to prosper and achieve its stated aims for two and a half decades.

Bibliography

- Davies, W. V. 2001. 'Kurgus 2000: The Egyptian Inscriptions', Sudan & Nubia 5, 46-58.
- Davies, W. V. 2003. 'La frontière méridionale de l'Empire: Les Égyptiens à Kurgus', Bulletin de la Societé Française d'Égyptologie 157, 23-37.
- Davies, W. V. 2004. 'Jebel Dosha: The Egyptian Inscriptions', *Sudan & Nubia* 7, 60-63.
- Davies, W. V. 2008. 'Kurgus 2004: The Epigraphic Results', *Kush* 19, 15-19.
- Davies, W. V. 2014. 'The Korosko Road Project. Recording Egyptian inscriptions in the Eastern Desert and elsewhere', *Sudan & Nubia* 18, 30-44.
- Davies, W. V. and I. Welsby Sjöström 1998. 'New Fieldwork at Kurgus', Sudan & Nubia 2, 26-34.
- Davies, W. V. and I. Welsby Sjöström 1998-2002. 'Kurgus 1998: A Preliminary Survey', Kush 18, 45-59.
- Edwards, D. N. 1998. Gabati. A Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan. Vol. 1. Sudan Archaeological Research Society Publication 3. London.
- Ginns, A. 2015. 'The 2015 Season of Excavations at Kurgus', Sudan & Nubia 19, 132-142.
- Haddow, S. D. 2014. 'The 2014 season of excavations at Kurgus. Excavations in the cemetery, site KRG3', Sudan & Nubia 18, 138-147.
- Judd, M. A. 2012. Gabati: A Meroitic, Post-Meroitic and Medieval Cemetery in Central Sudan. Vol. 2: The Physical Anthropology. Sudan Archaeological Research Society Publication 19. London.
- Mallinson, M. D. S. 1997. 'Preliminary Report: SARS Survey From Omdurman To Gabolab 1997', Sudan & Nubia 1, 25-27.
- Mallinson, M. D. S. and L. M. V. Smith forth. Road Archaeology in the Middle Nile Volume 2, Excavations from Meroe to Athara 1994. Sudan Archaeological Research Society Publication 12. London.
- Mallinson, M. D. S., L. M. V. Smith, C. Le Quesne, P. Sheehan and S. Ikram 1996. Road Archaeology in the Middle Nile, Vol. 1, The SARS Survey from Begraviya-Meroe to Atbara 1993. Sudan Archaeological Research Society Publication 1. London.
- Nicholas, M. 2014. 'The 2014 season of excavations at Kurgus. Excavations in the fort, site KRG2', Sudan & Nubia 18, 148-155.

- Welsby, D. A. 2001. Life on the Desert Edge. 7000 years of Settlement in the Northern Dongola Reach, Sudan. Sudan Archaeological Research Society Publication 7. London.
- Welsby, D. A. 2011. Sudan's First Railway, The Gordon Relief Expedition and the Dongola Campaign. Sudan Archaeological Research Society Publication 19. London.
- Welsby, D. A. 2012. 'The Kerma Ancien cemetery at site H29 in the Northern Dongola Reach', Sudan & Nubia 16, 20-28.
- Welsby, D. A. 2013. 'Surveys at the Fifth Cataract and on the Sudan Military Railway and excavations at Kawa, 2012-13', *Sudan & Nubia* 17, 131-136.
- Welsby, D. A. and I. Welsby Sjöström 2006. 'Exploration at Jebel Umm Rowag (NF-36-M/3-K-10)', Archéologie Du Nil Moyen 10, 233-255.
- Welsby Sjöström, I. 2001. 'Excavations at Kurgus: The 2000 Season Results', Sudan & Nubia 5, 59-63.
- Welsby Sjöström, I. 2008. 'Kurgus 2000, 2002 and 2004 Seasons. Interim Report on the Archaeological Work ', *Kush* 19, 97-99.
- Welsby Sjöström, I. 2014. 'Kurgus 2012: report on the survey', Sudan & Nubia 18, 130-137.