

SUDAN & NUBIA

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Contents

Kirwan Memorial Lecture

- Meroitic royal chronology: the conflict with Rome
and its aftermath 2
Janice W. Yellin

Reports

- Middle Stone Age and Early Holocene Archaeology
in Central Sudan: The Wadi Muqadam
Geoarchaeological Survey 16
Rob Hosfield, Kevin White and Nick Drake
- Newly Discovered Middle Kingdom Forts
in Lower Nubia 30
James A. Harrell and Robert E. Mittelstaedt
- The Pharaonic town on Sai Island and its role
in the urban landscape of New Kingdom Kush 40
Julia Budka
- In a Royal Cemetery of Kush: Archaeological
Investigations at El-Kurru, Northern Sudan, 2014-15
- Introduction 54
*Geoff Emberling, Rachael J. Dann
and Abbas Sidahmed Mohamed-Ali*
- Cultural Heritage at El-Kurru 54
Abbas Sidahmed Mohamed-Ali
- Documentation and Conservation of the
Painted Tombs: Progress Report 57
VII and XRF Analysis of the Painted tombs
Rikke Therkildsen
- Visualizing the Painted Tombs 58
Sarah M. Duffy
- Excavation of Pyramid Ku. 1 60
Geoff Emberling
- The Pyramid Chapel Decorations of Ku. 1 63
Janice W. Yellin
- A Mortuary Temple at El-Kurru 65
Geoff Emberling
- Meroitic Graffiti in the Mortuary Temple 67
Sebastian Anstis
- Some Remarks on Stonemasons' Marks in the
Mortuary Temple 68
Tim Karberg
- Conclusions and Prospects 69
*Geoff Emberling, Rachael J. Dann
and Abbas Sidahmed Mohamed-Ali*
- The Qatar-Sudan Archaeological Project –
Excavations and other activities at Kawa
in the 2014-15 season 71
Derek A. Welsby

- The Meroitic Palace and Royal City 80
Marc Maillot
- The Qatar-Sudan Archaeological Project at Dangeil
Satyrs, Rulers, Archers and Pyramids: 88
A Miscellany from Dangeil 2014-15
*Julie R. Anderson, Mahmoud Suliman Bashir
and Ribab Khidir elRasheed*
- Dangeil: Excavations on Kom K, 2014-15 95
Sébastien Maillot
- The Meroitic Cemetery at Berber. Recent Fieldwork
and Discussion on Internal Chronology 97
Mahmoud Suliman Bashir and Romain David
- The Qatar-Sudan Archaeological Project – Archaeology
and acoustics of rock gongs in the ASU BONE
concession above the Fourth Nile Cataract, Sudan:
a preliminary report 106
Cornelia Kleinitz, Rupert Till and Brenda J. Baker
- The Qatar-Sudan Archaeological Project – 115
The Meroitic Town of Hamadab and the
Palaeo-Environment of the Meroe Region
Pawel Wolf
- The 2015 Season of Excavations at Kurgus 132
Andrew Ginns
- Plant Macro-remains Recovered from El-Hamra 143
Christian Complex Excavation in El-Ga'ab
Depression, Sudan
Ikram Madani, Yabia F. Tahir and Hamad M. Hamdeen
- QSAP Dam-Debba Archaeological Survey Project 149
(DDASP). Preliminary Results of the second season
Fawzi Hassan Bakhiet
- Archaeology at Selima Oasis, Northern Sudan –
recent research 161
Friederike Jesse, Coralie Gradel and Franck Derrien
- Results from the re-investigation of Henry
Wellcome's 1911-14 excavations at Jebel Moya 170
Michael Brass

Miscellaneous

- Obituary
Denver Fred Wendorf, Jr. (1924-2015) 181
Romuald Schild

Front cover: QSAP Dam-Debba Archaeological Survey Project. Site DS7, Ganati: the re-erected columns in the church (photo: Fawzi Hassan Bakhiet).

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The Meroitic Cemetery at Berber. Recent Fieldwork and Discussion on Internal Chronology

Mahmoud Suliman Bashir and Romain David

In continuation of the systematic archaeological investigation of Berber cemetery a short season in 2013 was conducted. The main objective was to carry out a geophysical survey in order to determine the size of the cemetery and to locate tomb shafts. Test excavations to confirm the magnetic survey results were also conducted and a total of four tombs were excavated. In this report we will present only one of the excavated tombs.

Magnetic Survey at Berber Cemetery and the Discovery of Tomb Superstructures

Magnetic prospection was carried out using a Geoscan Fluxgate Gradiometer (FM256). The survey was conducted using a 20 x 20m square grid. The measurements within each grid were collected along parallel traverses 500mm apart with a sample interval of 250mm. The survey covered an area of about 9600m² (c. 1 hectare) (Plate 1).

The magnetic survey showed clusters, black and white in colour, indicating anomalies associated with red bricks. These are groups of graves; some of these graves contain red bricks. The anomalies are associated with graves, which are confirmed by the excavated graves nearby. The enhanced regular anomaly in E03, shown by yellow circle, is a mud-brick pyramid, as confirmed by the excavation. In fact, a total of three mud-brick pyramid foundations varying in size were discovered (Figure 1).

The pyramids are square in shape and have an offering

chapel facing east (Plate 2). They were built of mud brick bonded with a whitish mortar (Plate 3). Royal and elite tombs with their substantial stone pyramid superstructures are well known and documented. However, less important tombs were also marked by mud-brick pyramids, which are on occasion accompanied by inscribed offering tables (Edwards 2004, 174).

With the exception of the three tombs noted above, the cemetery at Berber shows no traces of any visible superstructures covering the graves. However, it is likely that some tombs were covered by a low mound of gravel, a common



Plate 2. Mud-brick pyramids.



Plate 3. Whitish mortar joining mud bricks.

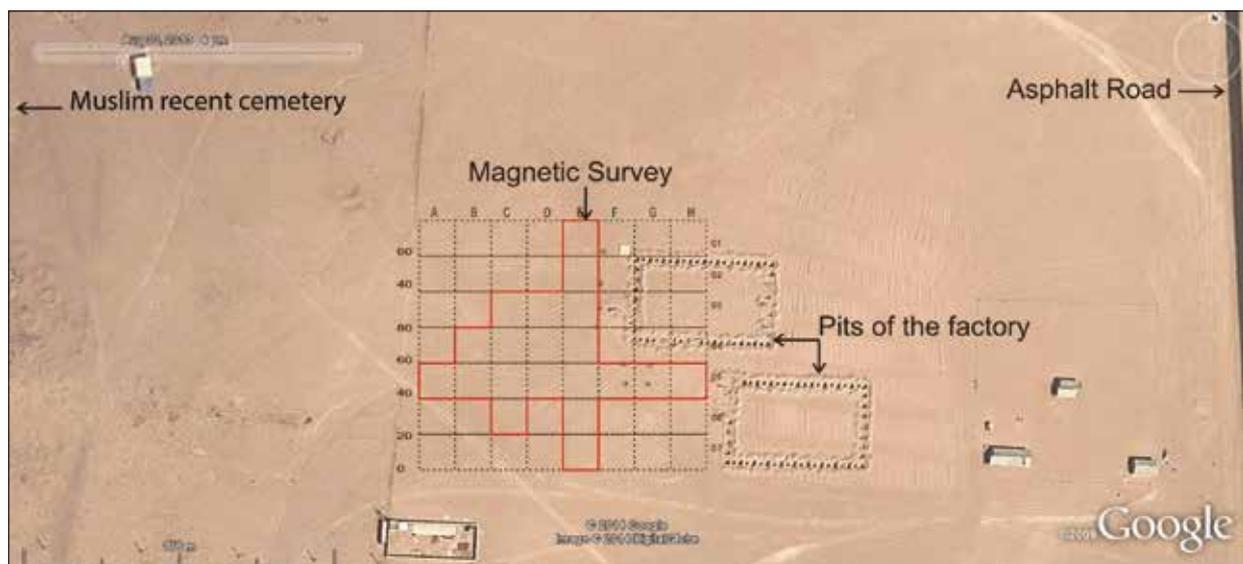


Plate 1. Satellite image with the location of the magnetic survey area marked.

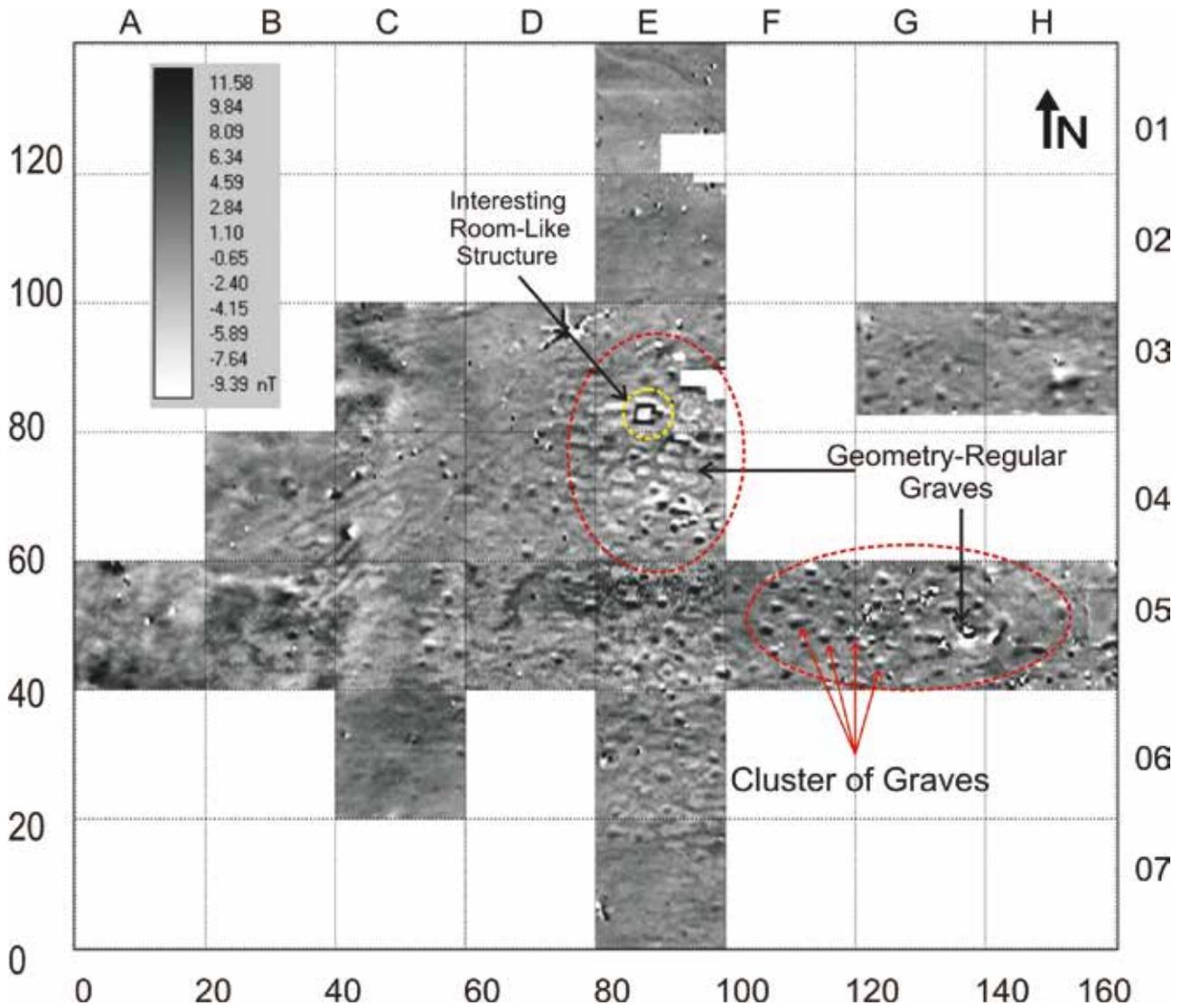


Figure 1. Interpretation of the magnetic survey data.

feature in some Meroitic cemeteries such as Gabati (Edwards 1998, 11). In fact, a low mound of gravel is covering the ground surface of the cemetery at Berber, which is clearly different from the soft sand of the surrounding area.

Pyramid BMC 38

This tomb has been recognised by the well preserved clear mud-brick superstructure found after clearance of the surface. This is the first evidence for the presence of superstructures at the cemetery. The superstructure is the foundation of a mud-brick structure probably a pyramid (3.03m E-W x 3.1m N-S). It consisted of about three courses, with a funerary chapel located on the eastern side (Plate 4). Two tombs have been distinguished by the clear whitish colour of their fill beneath the pyramid; BMC 38a and BMC 38b. This season the excavation was concentrated only in BMC 38a.

BMC 38a

In its structure this tomb has presented an axial burial type consisting of an east-west sloping descandary 5.1m long leading to an oval shaped east-west burial niche in the western



Plate 4. Pyramid BMC 38.

end. The fill in the descandary was a mixture of soft clay, soil and pebbles. A disturbed blocking wall revealed at a depth of 1.05m consisted of mud bricks, stones, and pebbles (Plate

5). The middle part of the wall was cut by a robber pit and the bricks had been removed.

Inside the burial an articulated skeleton was found lying in an extended position on its right side oriented east-west, the head to the west facing south (Plate 6). The right hand was extended by the body and the left hand extended over the ribs and across the pelvis to rest on the right hand. The left leg was semi-flexed over the right. There are clear traces of a poorly preserved wooden coffin.

Beside the skeleton on the northern side a complete well preserved copper-alloy bowl was found. A sharp blade of iron and a wooden *kohl* pot were found in front of the body.

In this tomb a fire place located on the southern side of entrance to the chamber was found with remains of charcoal. Charcoal was also been found beneath the skeleton under the ribs and hands. A total of three radiocarbon samples of charcoal and bone from BMC 38a were collected for chronological analysis.

Internal Chronology

The C¹⁴ dates from BMC 38a are derived from two charcoal samples from the layer under the skeleton and the third, from



Plate 5. Disturbed blockage in BMC 38.



Plate 6. Extended burial in BMC 38.

a sample of bone from the articulated skeleton. These samples provide valuable information on the general date of the cemetery. The three samples from BMC 38a provided early Meroitic dates: 2155 ± 30 BP (76.47 % ± 0.27, calibrated 357 to 97 BC), 2160 ± 25 BP (76.43 % ± 0.25, calibrated 356 to 111 BC), and 2170 ± 25 BP (76.32 % ± 0.24, calibrated 359 to 164 BC).

The sandstone offering table with an inscription in cursive Meroitic, found in BMC 6, is considered one of the important datable objects amongst the artefacts from the cemetery. Claude Rilly studied the object and stated that the style of decoration is attested from the mid 2nd century to mid 3rd century AD (Mahmoud Suliman Bashir 2010, 73), while paleographical evidence fits with a date around the middle of the 3rd century AD. When compared with the dating derived from a study of the ceramics from BMC 6, the later dating is supported.

Tombs BMC 39 and BMC 40 remain unexcavated, but they have similar square shaped structures of mud brick which have been identified and documented. Their location adjacent to BMC 38, and their similar tomb superstructures, suggest a similar date for these tombs. In tomb BMC 34, located beside BMC 38a, the three pottery jars that have been found are dated before the mid-1st century AD at the latest.

Meroitic ceramics from the necropolis of Berber and its internal chronology

The necropolis of Berber contains an exceptional number of undisturbed graves in which most of the material remains *in situ*. A preliminary study attempted to classify the main products encountered and to ascribe a broad chronological frame to each tomb (Mahmoud Suliman Bashir and David 2011). The links between the pottery of the well-dated tombs from the Western and the Northern Cemeteries at Meroe (Edwards 1999) as well as from Gabati (Edwards 1998) and the ceramics from Berber were particularly helpful during this first step. Further excavations provided more and more material (208 complete pots from 19 tombs), which makes possible our current progress with refining the internal chronology of the site, notably by the study of the distribution of the same products in the different tombs of the necropolis. Connections between tombs, sometimes distant from each other, are highlighted with this method.

The most valuable data, recorded in Table 1, illustrates the distribution of some well-recognisable shapes within the necropolis. The tombs are arranged in sequence from what we suppose to be the earliest burial (BMC 34, Figure 2) to the possibly latest inhumation (BMC 12, see the material in Mahmoud Suliman Bashir and David 2011, fig. 6). The position of the others is determined by the similarity of their material to that of the previously mentioned graves. Nevertheless, we lack precision to ascertain the exact sequence of these burials as no stratigraphic relationship has been evidenced in the field. A general grouping is thus desirable. Grave BMC 34 is the only tomb situated on the western part of the site, close to pyramidal superstructures, from which material has

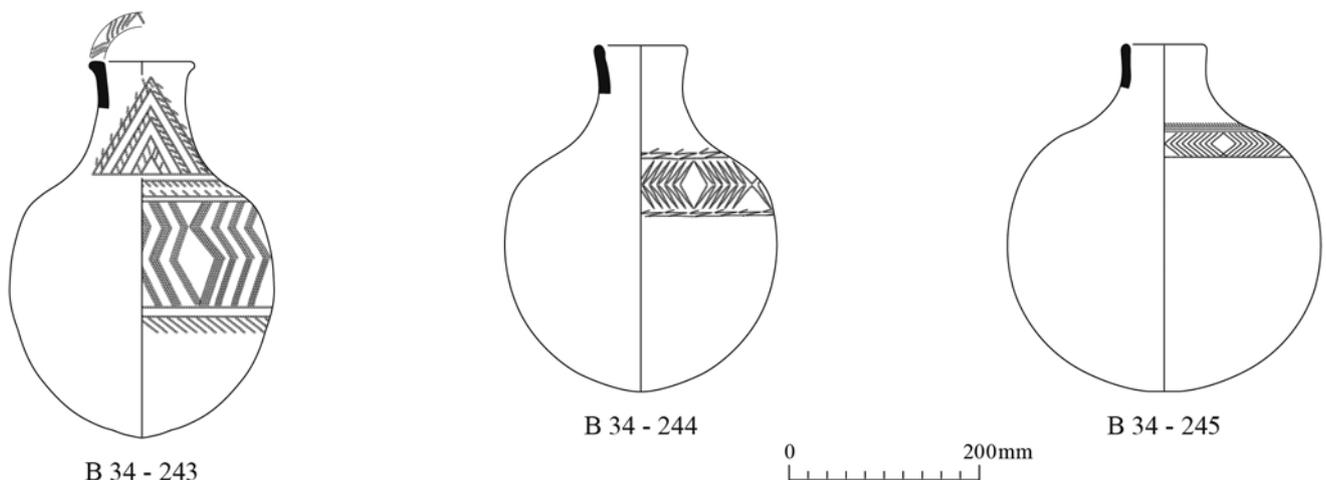


Figure 2. The three handmade jars from BMC 34 – scale 1:8.

been studied. Three handmade jars (fabric B7, see Mahmoud Suliman Bashir and David 2011, 123) were deposited next to the deceased (Mahmoud Suliman Bashir 2013, 95). We consider this material as the earliest assemblage in the cemetery, without any precise dating, but rather similar products, found at Gabati in a context dated toward the mid 1st century AD, might give an important clue (Edwards 1999, fig. 6.19). The tombs BMC 24 and BMC 31 also contained handmade jars among which two exemplars show similarities in shape and decoration with a pot from BMC 34 (compare B 34 - 245 to B 24 - 156 and B 31 - 242, Figure 3). The same observation can be made from handmade jars decorated with a crossed impressed frieze at the shoulder found in tombs BMC 31, BMC 1 and BMC 8 (B 31 - 226, B 1 - 082 and B 8 - 119, Figure 3). In their turn, BMC 8 and BMC 10 share exactly the same products to which we can add the bottle found in the cavity of BMC 23 that bears a similar motif (B 8 - 125, B 10 - 112, B 23 - 284, Figure 3). We can continue with tombs BMC 10, BMC 3 and BMC 24 in which wheel-made jars with an inward-sloping neck and a modelled rim and decorated with painted black and white bands are attested (B 10 - 113, B 3 - 023, B 24 - 155, Figure 3). The form also appears in tombs BMC 26, BMC 23, BMC 33, BMC 24, BMC 27 and BMC 29, but without any decoration and in different sizes (B 26 - 180, B 23 - 287, B 33 - 217, B 24 - 157, B 27 - 168, B 29 - 235, Figure 4). These types can be compared to some exemplars unearthed at Gabati where they occur in contexts dated towards the end of 1st and during the 2nd century AD (Edwards 1998, fig. 6.6, no. 5501, fig. 6.7, no. 5701). Tomb BMC 24 is dated towards the second half of the 1st - beginning of the 2nd century AD because of the presence of a jar (B 24 - 154, Figure 4) with a collar rim and a ringed base in the assemblage (Francigny and David 2013, 112-113, fig. 3). We can follow the various types of this production in tombs BMC 26, BMC 1, BMC 33 and BMC 7 (B 26 - 188, B 1 - 067, B 33 - 216, B 7 - 054, Figure 4). The same variety has been observed in the Western Cemetery at Meroe (Dunham 1963, 347, fig. K1-4). Both BMC 1 and BMC 7 contain fineware painted bowls of the same shape as seen in BMC 10 (see

Mahmoud Suliman Bashir and David 2011, 122, fig. 1, nos 1-2 and fig. 4, no. 5 and Table 1, type of B 1 - 001). All the deceased in the necropolis of Berber, except the one in the descendency of BMC 23 (BMC 23b, which is distinguished from the burial of the cavity, BMC 23a: see Mahmoud Suliman Bashir 2013, 93), were accompanied by ledge-rimmed bowls with a flat base (type of B 31 - 227, Table 1), but this burial is linked with BMC 7 by the handmade globular jar with cross incisions below the rim (Figure 5). Another product, the large jars with a short neck and an ovoid body, is well-attested in tombs BMC 24, BMC 1, BMC 8, BMC 26, BMC 7 and BMC 29 (type of B 24 - 158, Table 1). The shape is frequently found at Meroe in graves dated from the 2nd to the first half of the 3rd century AD (Mahmoud Suliman Bashir and David 2011, 123). The last type regularly noticed consists of ledge-rimmed bowls with a rounded base present in tombs BMC 24, BMC 7 and BMC 12 (type of B 24 - 153, Table 1). These forms alternate with the previous mentioned ledge-rimmed bowls with a flat base during the 2nd and 3rd century AD (Mahmoud Suliman Bashir and David 2011, 122).

As summarized in Table 1 and recorded on the map (Figure 6), the tombs in the necropolis of Berber display a limited variety of products that might indicate a chronological link as well as a community of ritual practices. We can separate them into four chronological groups on the basis of what was defined in the first report (Mahmoud Suliman Bashir and David 2011) and from the present data. Only one tomb, BMC 34, should date at the latest to the mid 1st century AD as explained previously. The second group may contain BMC 31, BMC 24, BMC 1, BMC 8, BMC 10, BMC 23a (the burial inside the cavity), and probably BMC 3 and BMC 26, and would fit into the period from the second half of the 1st to the beginning of the 2nd century AD, which corresponds to the date proposed for BMC 1 (Mahmoud Suliman Bashir and David 2011, 123). The tombs BMC 4, BMC 29, BMC 33, BMC 27 and BMC 7, the individual buried in the descendency of BMC 23 (BMC 23b), along with BMC 16 and BMC 32, should be of later date, during the 2nd and probably at the beginning of 3rd century AD (Mahmoud Suliman Bashir and

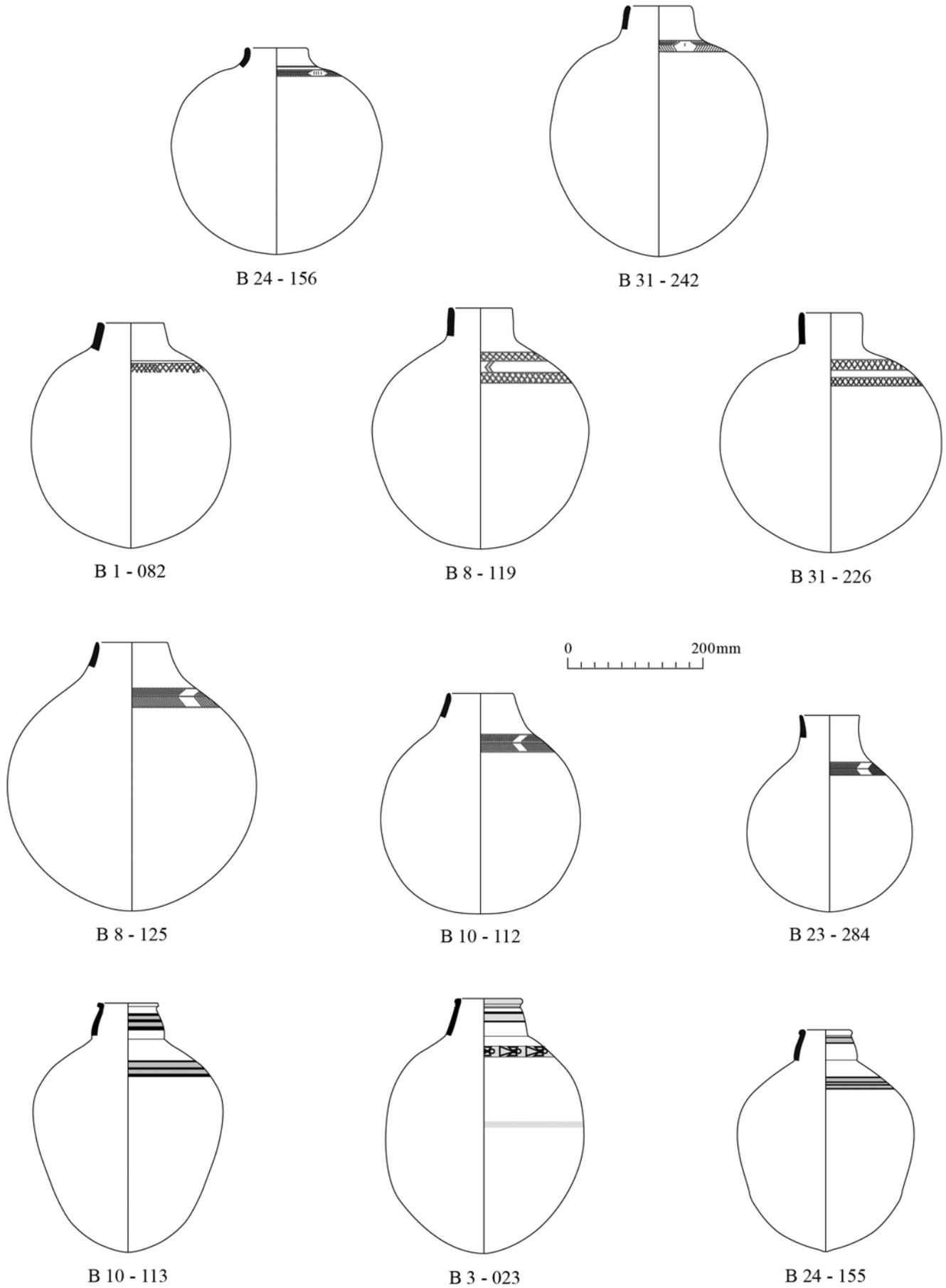


Figure 3. Various handmade and wheel-made common jars in the necropolis of Berber – scale 1:8.

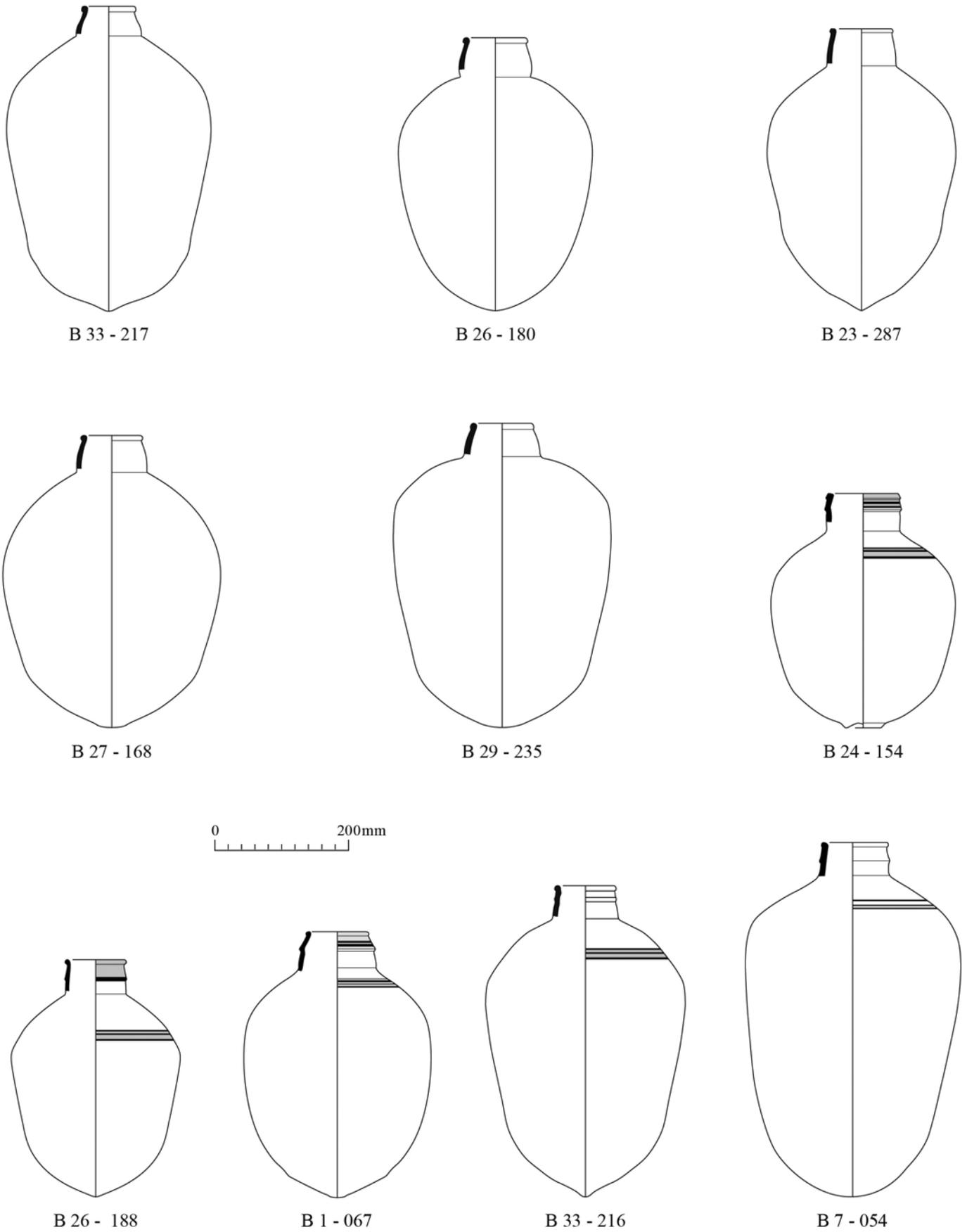


Figure 4. Various wheel-made common jars in the necropolis of Berber— scale 1:8.

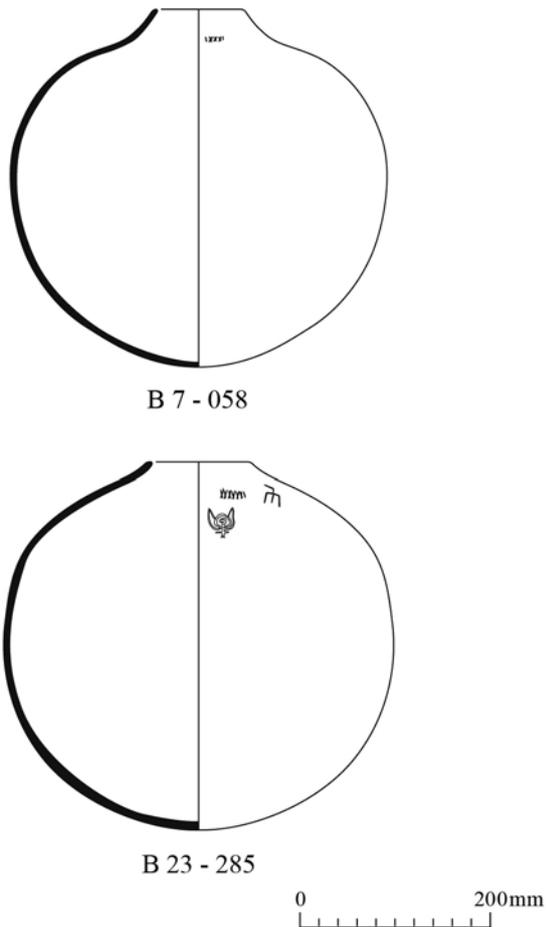


Figure 5. Handmade jars from BMC 7 and BMC 23 – scale 1:8.

David 2011, 123-125). The last group consists of tombs dated to the 3rd century AD: BMC 6 and BMC 12. The late date of BMC 12 has already been justified (Mahmoud Suliman Bashir and David 2011, 125) and we can surely ascribe the same date range to BMC 6 as an offering table with a palaeographic style which fits with a mid 3rd century AD date (Mahmoud Suliman Bashir 2010, 73) has been found in its filling.

This first attempt to date all the excavated tombs of the necropolis illustrates a general pattern in the development of the burials that does not seem to follow a linear evolution. As some tombs might have been reused or some clusters may exist such as at Sedeinga (Rilly and Francigny 2010; 2011; 2012; 2013), the chronological links between one grave and its direct neighbour may be far from evident.

According to the likelihood of a similar date for BMC 34, BMC 38, BMC 39 and BMC 40, the authors suggest that graves in that area of the cemetery are earlier and may fall within the late 2nd century BC. In fact, the presence of mud-brick pyramids with offering chapels and the east-west burial tradition together with fewer or no grave goods were elements of early and middle Meroitic tombs. Therefore, in addition to the radiocarbon result we believe that the evidence for our dating of this part of the cemetery is confirmed.

It is still too early to suggest an accurate date for these tombs; however, based on the available evidence, the site

can be provisionally dated between the late 2nd century BC and the mid 3rd century AD. However, a comparison-study with the other artifacts is still underway and better results are expected. Considering the presence of both extended and contracted burials, we notice that only the earlier inhumations contain an extended body (BMC 34, BMC 24, BMC 8 and BMC 23a). The ritual comprising bowls deposited on a basket-tray, pointed out by P. Lenoble (1991, 247), is widely followed at Berber as only two graves do not contain any exemplar. BMC 34 seems to be older than the introduction of such a custom and BMC 2 has been heavily plundered and has not been taken into account in this study.

Acknowledgements

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The project field director would like to thank the team members: Murtada Bushara (archaeologist), Mohammed Saad (archaeologist), Sami Mohammed (archaeologist), Yassin Mohammed (surveyor), Sheikh Mohammed (cook), and Dr Mohammed Abdelwahab and the geophysical survey team from Dongola University.

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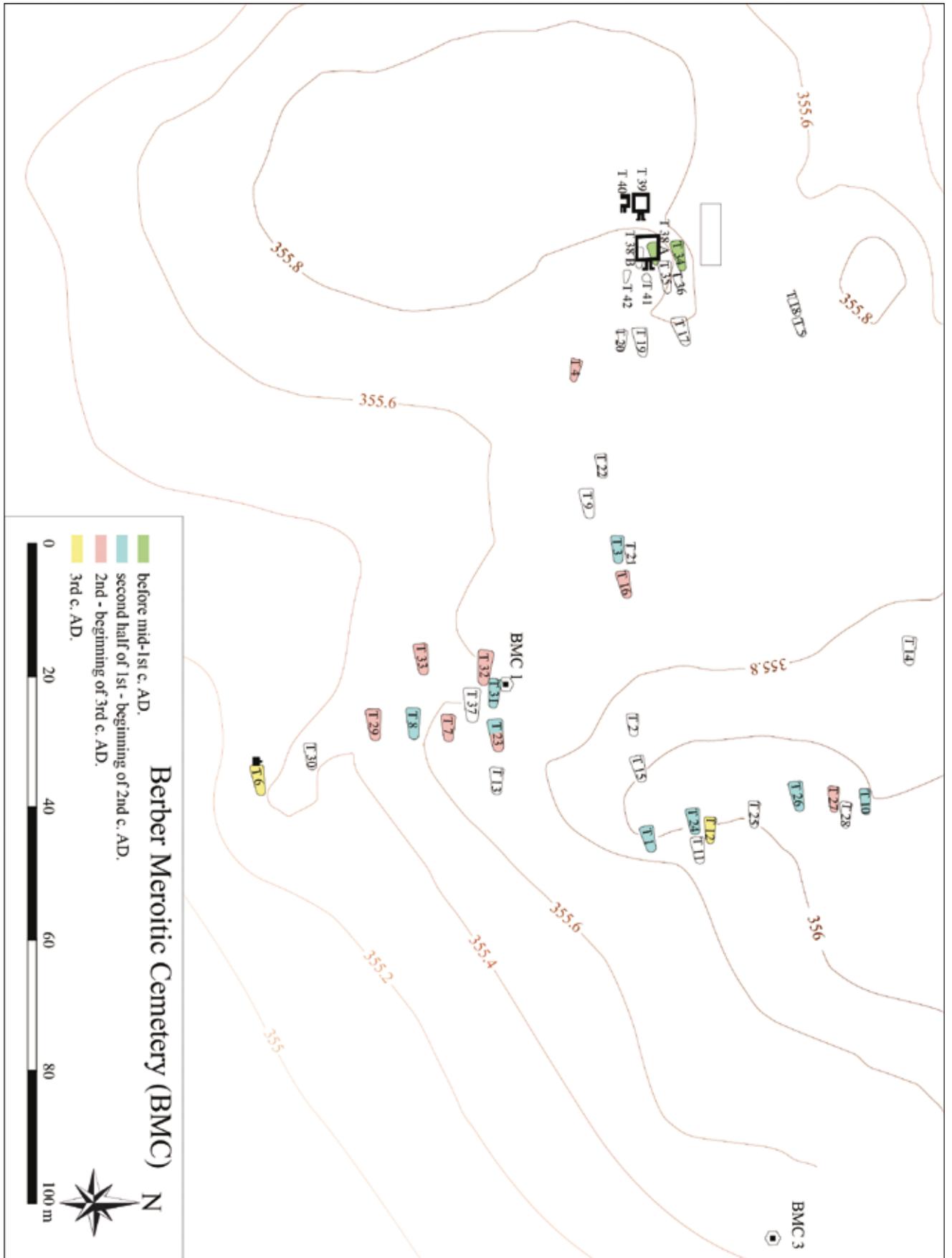


Figure 6. Map of the necropolis of Berber.



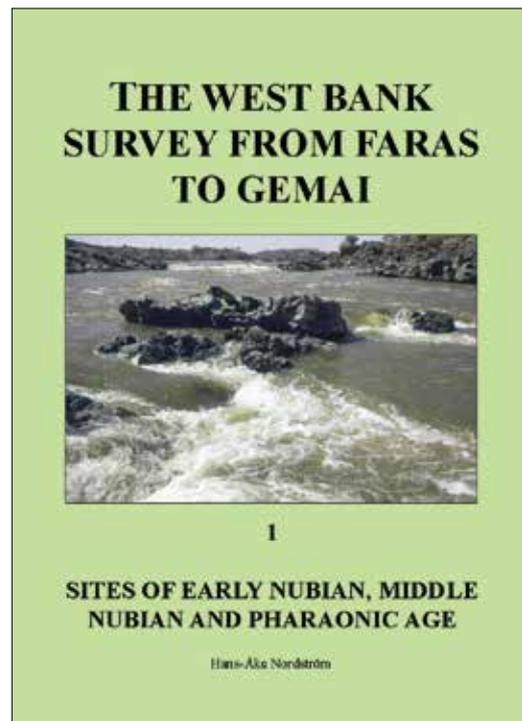
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Gabati

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Cemetery in Central Sudan.

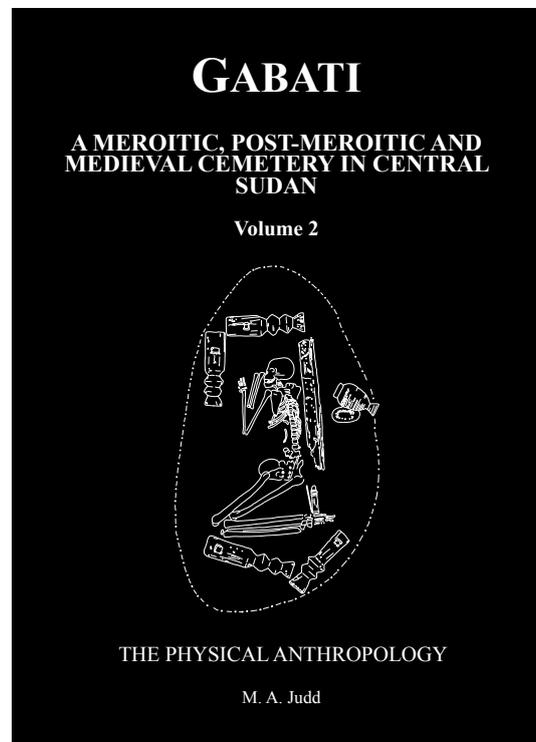
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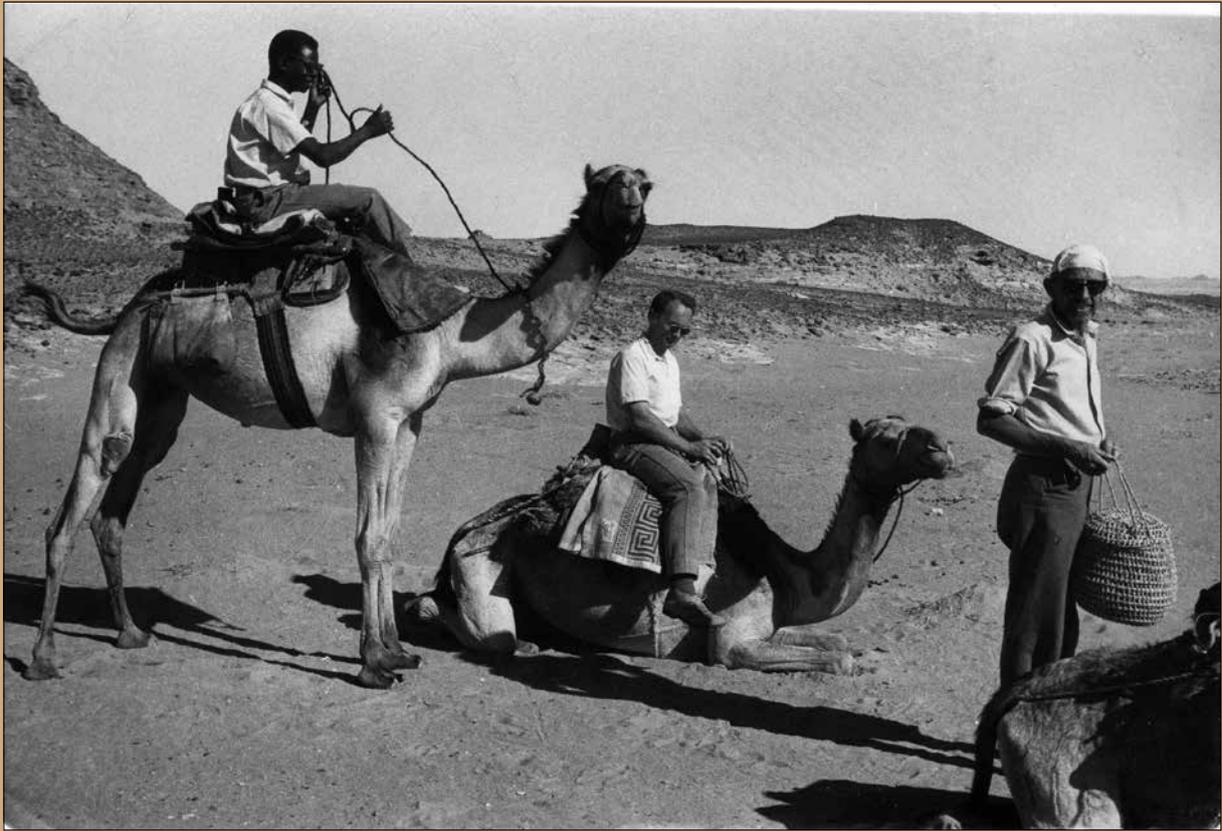
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Members of the University of Ghana Expedition to Sudan. John Alexander (centre), James Anquandah (left), Tony Bonner (right) (photo: SARS Alexander Archive, ALE P003.05).



The Debeira West excavation team 1964 with amongst others, Peter and Margaret Shinnie, John Alexander, John Anquandah and Tony Bonner (photo: SARS Alexander Archive, ALE P003.04).