THE ENIGMA OF KAB MARFU'A: PRECIOUS GEMS IN EGYPT'S EASTERN DESERT

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he Berenike Project of the University of Delaware (USA) and Leiden University (the Netherlands)/University of California at Los Angeles, USA) has, as one of its objectives, the archaeological survey of Egypt's Eastern Desert. One site that we have studied in some detail is the settlement at Kab Marfu'a. The name for the ruins is one now used by the local 'Ababda Bedouin; the ancient name for the settlement remains unknown and no extant ancient author seems to refer to the site.

Kab Marfu'a lies about 65km southwest of Marsa Alam on a high sandy plateau about 1km north of the large Roman *praesidium* (fort) in Wadi Gemal (Figs 1-2), which would have provided protection for the settlement. This fort, now badly damaged, may be the *Apollonos* recorded in a 1st-century AD inscription detailing construction and repairs conducted by Roman troops on this and other *praesidia* and *hydreumata* (wells) in the Eastern Desert. Pliny the Elder (*Natural History*), the *Antonine Itin*- Fig 1. Praesidium (Roman fort) in Wadi Gemal (ancient Apollonos). Photo: S.E. Sidebotham.

Fig 2 (below left). Map of Egypt's Eastern Desert. Drawing: H. Barnard.

Fig 3 (right). Plan of the central part of the settlement of Kab Marfu'a. Drawing: H. Barnard.







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Fig 4. Kab Marfu'a, view of buildings in the central area. Photo: S.E. Sidebotham.

is a mountain on the slope of which is a large platform, 15 x 20m, constructed of cobbles and boulders, in places over 4m high. Remains can be seen of a monumental staircase leading up to this platform from what we suggest was the administrative centre of Kab Marfu'a (Fig 6). On this platform are the remains of what must have been a small temple that dominated the site (Fig 7). High above this putative temple on the summit of the mountain and another nearby are several substantial cairns from which the fort in Wadi Gemal, as well as several skopeloi (watch towers) in the region, can be seen. They must have been part of the security and signalling system around the settlement.

The sides and tops of the low mountains around Kab Marfu'a have scores of much smaller cairns arranged in groups. The purpose of these is unclear, but must be related to the function of the site. Large working areas, oval to rectilinear in plan and surrounded by low walls, also suggest that some industrial process took place at Kab Marfu'a. Other indications of the functional character of the settlement are the several dozen fist-sized quartz stone pounders, varying from 6-10cm in diameter, which the survey collected. Such pounders are typical of ancient mining sites elsewhere in the Eastern Desert.

We also found several beryls at Kab Marfu'a. Beryl, beryllium aluminum silicate, is a green gemstone closely related to emerald and aquamarine. It was highly valued in antiquity and its only source within the Roman Empire was the region of Mons Smaragdus (Wadis Sikait, Nugrus, Umm Harba, Gebel Zabara, and Umm Kabu) just north-east of Kab Marfu'a. Beryls mined there would have been transported to the Nile Valley using largely the same routes as the traffic to and from Berenike. Among the buildings at Kab Marfu'a are several cavities excavated into the surrounding rock outcrops (Fig 8). As beryls are not found in this type of rock, however, these man-made caverns were likely used for subterranean storage.

Pottery collected at Kab Marfu'a revealed activity at the site from the 1st to the 5th century AD, but the period of most intense occupation was clearly from the mid-2nd or 3rd through the 4th century AD. Like many pottery assemblages found throughout the Eastern Desert, large amphorae meant to contain liquids such as wine and oil dominated. At Kab Marfu'a it was notable that large numbers of these were imported from great distances, rather than coming from the Nile Valley. Unusually for the Eastern Desert, many of these imported vessels belong to a small, flat-bottomed shape with

erary, and the *Peutinger Table* also mention *Apollonos* as one of the way stations on the main thoroughfare between Berenike and the Nile emporia of Edfu (in Ptolemaic times) and Coptos (in the Roman period). Travellers between the Nile Valley and the Red Sea could find water, food, and shelter here (Fig 1).

Kab Marfu'a consists of more than 100 structures spread out over an area of about 250 x 300m. The centre of the site (Fig 3) comprises a number of large and finely constructed edifices (Figs 4-7), one of which at least must have had a second floor. This is evident from a well-built stone staircase in one of the rooms. The upper floor is now lost, as are the roofs elsewhere on site. Most likely, they were built of wood, which was and remains a valuable commodity in the desert; it was probably all carried off during or shortly after abandonment of the settlement.

The building walls at Kab Marfu'a are constructed of flat stones stacked with minimal use of mud mortar. They have shallow foundations that rest on sand. Despite this, some still stand to a

height of over 3m and preserve windows, niches, and lintels (Fig 5). These tall walls usually taper dramatically from fairly thick (1m) at the base to substantially thinner (0.5m) towards the top. Some buildings make use of natural boulders or rock faces for one or more of their walls. The dearth of wall tumble adjacent to some of these lower walls (Fig 4) suggests that they were probably never much higher. If they once had superstructures, these must have been composed of some impermanent material like cloth, animal hides, or matting. Blocked doors and windows, at least one of which was converted into a niche, indicate some remodelling of the original structures and suggest a prolonged period of occupation. Another edifice preserves several very small rooms with doorways only about 45cm wide and 55cm high leading into them. We interpret these rooms as animal pens that would indicate the practice of animal husbandry.

A number of graves and other small structures lie south of the settlement. Just north of the centre of Kab Marfu'a Fig 5. Kab Marfu'a, a wellpreserved structure with window. Photo: S.E. Sidebotham.

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Fig 6 (left). Kab Marfu'a, with a temple (at right) located above the 'administrative centre' (below left). Photo: S.E. Sidebotham.

Fig 7 (below left). Kab Marfu'a, temple with platform and staircase, looking north-west. Photo: S.E. Sidebotham.

Fig 8 (below right). Kab Marfu'a, subterranean cavity beneath a structure. Photo: S.E. Sidebotham.

grave goods. No arguments have been found to support the former scholarly association of these vessels with the Blemmyes, a desert people otherwise known only from rather ambiguous historical sources. Apart from examining the production and purpose of the vessels, another question to be addressed is the reason why the desert dwellers started and stopped producing their own ceramics so suddenly.

Analysis of the ceramic finds from the fort in Wadi Gemal, ancient Apollonos, indicates that it was active from at least the 1st century AD well into the 6th century. Similar research at the beryl mines in the Mons Smaragdus area resulted in comparable dates. A reference to these mines was, furthermore, made in an early 1st century AD inscription found at the Roman quarry in Wadi Umm Wikala. It can, thus, be concluded that beryl mining started at least as early as the 1st century AD and that the initial construction and use of Kab Marfu'a can be associated with these activities. The presence of both beryls and industrial quartz pounders lend tantalising evidence for the function of the site. Yet since we have found no evidence of mining in the vicinity, our initial and tentative interpretation, therefore, is that Kab Marfu'a was a beryl-working and trading community that depended on the beryl mines to the north-east. The apparent abandonment of Kab Marfu'a sometime in the 4th or 5th century AD, well before beryl mining in the region came to an end, has no explanation at this point. As our work in the Eastern Desert continues, we hope to be able to address this and many other remaining enigmas. 1,

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grooved handles. Some of these were made in Gaul (France), but more are from Mauretania (Morocco/Algeria). Most of the vessels used for cooking and serving came from the Nile Valley, but again the assemblage was unusual in that numerous small jugs with flattened sides ('pilgrim flasks') were present. Therefore, it seems that the ceramics were skewed in function. Why the inhabitants of Kab Marfu'a would have required such specialised vessels is unclear.

We also collected T, Y, and Vshaped sherds carefully made from broken amphorae and reminiscent of similar sherds found at many other settlements in the Eastern Desert spanning a wide range of dates and activities. At this point the function of such deliberately shaped sherds is unclear; they may be tools or gaming pieces.

Also found at Kab Marfu'a, mostly on one platform west of the central wadi, were sherds of hand-made vessels belonging to a corpus now identified as Eastern Desert Ware (EDW). Small numbers of vessels belonging to this group have been found in 4th-6th century AD contexts in the desert between the Nile and the Red Sea in southern Egypt and northern Sudan, as well as in the Dodecaschoinos (Lower Nubia). Most are small cups and bowls with thin walls and made of a sandy fabric. Surfaces are typically wiped, smoothed, or burnished. Many outside surfaces are also decorated with incised or impressed asymmetric patterns, often enhanced by a white infill or a partial red slip.

These vessels were most likely produced and used by nomadic desert dwellers. To understand better these people, sherds of EDW are being studied using conventional techniques, but also by petrographical microscopy, chemical fingerprinting, and organic residue analysis. Interpretation of the results is still on-going, but preliminary indications seem to confirm that the vessels were made in different places, whenever the need or opportunity occurred. Organic residues indicate that the vessels were receptacles for food and not solely used as drinking cups or

