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Short fieldwork report

Human remains from 'Marea'/Philoxenite, Egypt, 2023

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The principal burial ground of 'Marea'/Philoxenite was located to the south-east of the main urban core of the town. The burial area, serving as a type of 'necropolis hill' on the account of its elevated position on a natural rock hill, is located little over 50m to the south-east of the public baths. Burials were already noted there by el-Fakharani (1983:176-178) though his account includes just a short description, without plans or photographs. More extensive work was conducted some 20 years later by the Polish archaeological team, though these efforts focused not on graves as such, but rather on newly identified Late Antique family burial chapel (Babraj & Szymańska 2008:177-178). A more comprehensive architectural survey conducted in 2019 revealed that the hill included several other standing structures (possibly more burial chapels?) and was surrounded by a low rubblework wall that separated it from the rest of the town (Kutiak 2025:150). Thus, in the Byzantine period the hill must have formed an important topographical location, marked by religious architecture and visible from afar to visitors approaching Philoxenite from the mainland.

The two rock cut tombs were opened in 2019 by Kacper Wasilewski (Sobczyńska & Wasilewski 2021:183-185). Initially it was thought they might represent the oldest, pre-Christian structures preserved on the hill. This interpretation was based mainly on their architecture as both tombs were accessible via steps with open passageways (*dromoi*). This, however, is far from certain as similar tombs dating to the Byzantine period were excavated by el-Fakharani in the hinterland to the south of 'Marea'/Philoxenite (Solieman 2004:279-282).

During the 2023 excavation season, research focused on human remains from Grave 2, which was partially excavated in 2021 and a part of the bone assemblage studied in 2022 (Sołtysiak et al. 2025). During the present season, remaining bones from the 2021 season were described and measured and in parallel the excavation of this grave continued, with several layers of bone still left for future work. Therefore,

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this report does not provide the final interpretation of this assemblage, but only a brief outline of the work in progress.

This season marked a resumption of excavation efforts of the rock-cut tomb Grave 2, which had been opened during an earlier campaign. Upon initial reopening of the tomb, the layer of sand, deposited after the first excavation campaign to protect the remains, was carefully removed to expose the underlying bone deposit. Every exposed layer was drawn and documented using photogrammetry (**Figure 1**). In order to allow for the models to be georeferenced and the subsequent creation of orthophotos of each layer, five points located on the walls of the tomb were tachymetrically measured.

Following thorough documentation, all visible bones were methodically removed and individually labelled with the layer number (I-V) and consecutive numbers (1,2,3, ...) to allow for identification of each bone element, their position within the deposit

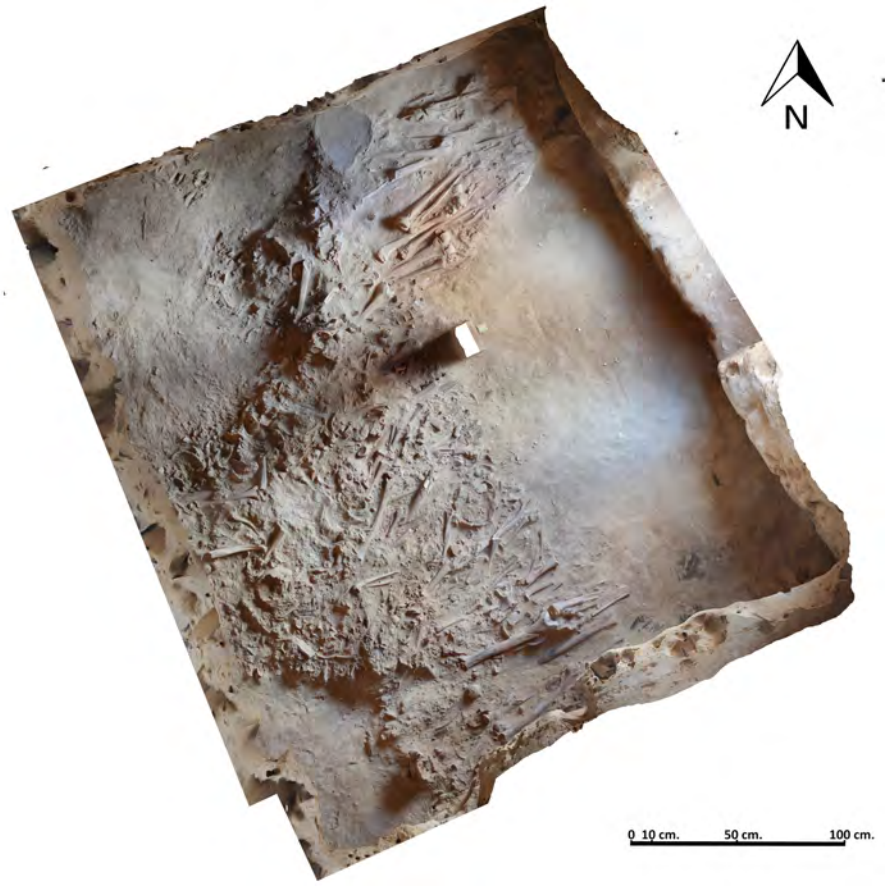

Figure 1. Orthophotograph of Layer II in Grave 2. Photograph by T. Borowski.

and potential articulations with elements from other layers. Specific attention was given to the identification of anatomical articulations to reconstruct the nature of the deposit and the original placement of skeletal elements within it. In fact, several elements were found in anatomical articulation (e.g. femora with tibiae and fibulae, femora with ilia and sacra, articulated vertebrae and ribs), suggesting that these elements were introduced into the tomb before the individuals were fully skeletonised.

Apart from human remains, the excavations yielded several fragments of pottery (bodysherds of Mareotic AE 5/6) and three wick holders, as well as two beads and two rings of metal: one (smaller) most likely once formed part of a chain and the

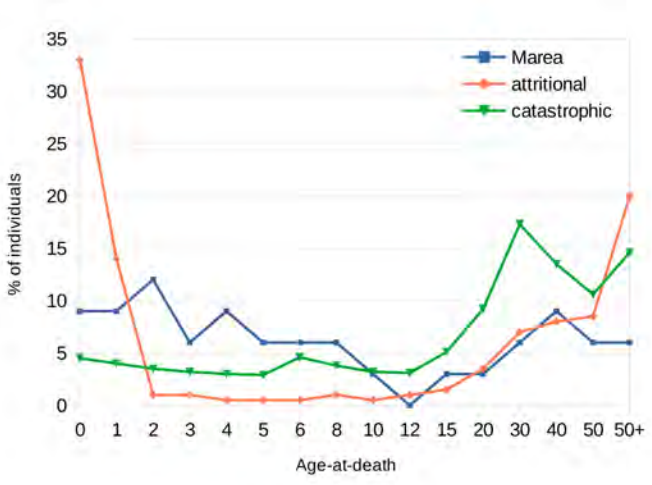

Figure 2. Age-at-death pattern in Grave 2. Drawing by A. Sołtysiak.

Figure 3. Grave 2: A case of degenerative joint disease in the first metatarsal. Scale bar 1cm. Photograph by A. Sołtysiak.

other (larger) may have been worn on a finger. Unfortunately, none of these objects can be used to securely date the burial. Numerous very similar wick holders were, however, recovered from the nearby monumental bath complex, from stratigraphic layers which can be securely dated to the 6th c. CE (Konstantinidou 2023:44).

The extent of the deposit proved to be larger than initially expected. Consequently, the excavation strategy was adjusted during the last four days to focus more intensively on the eastern corner in an attempt to locate the bottom of the tomb. However, the complexity of the deposit, characterised by intricate interconnections of skeletal elements, rendered complete removal unfeasible within the allotted time frame of the excavation season. It was eventually decided to forego complete removal during the 2023 campaign, prioritising the preservation of the deposit's contextual integrity.

Every retrieved element was mechanically cleaned and identified, with all possible measurements taken and pathological conditions noted following the protocols presented by Buikstra and Ubelaker (1994), with some modifications (Sołtysiak et al. 2019). No final calculation of the minimum number of individuals (MNI) is possible at this stage of research, but the roughly estimated MNI for the elements retrieved in 2021 and 2023 is between 60-120 individuals. Most elements belong to juvenile individuals, and the most common age-at-death range is between 1 and 9 years, with a very low number of neonates. The preliminary age-at-death distribution diagram shows that the number of children is higher than expected even for a catastrophic mortality profile (**Figure 2**).

In many adult individuals, a relatively high frequency of degenerative joint disease (DJD) was observed, sometimes with eburnation. The most commonly affected joints were distal epiphyses of metatarsals and toe phalanges (**Figure 3**).

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