



PRELIMINARY REPORT ON THE FOURTEENTH EXCAVATION SEASON OF THE ARCHAEOLOGICAL EXPEDITION TO WAD BEN NAGA

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ABSTRACT: The fourteenth excavation season of the Archaeological Expedition to Wad Ben Naga focused on archaeological exploration of the Typhonium (WBN 200) and its immediate surroundings, exploration of cemetery WBN C200 and on conservation of structures located in Central Wad Ben Naga.

KEY WORDS: Nubia – Meroe – Wad Ben Naga – Meroitic culture – Meroitic architecture

The fourteenth excavation season of the Archaeological Expedition to Wad Ben Naga took place between 17 February and 3 April 2017. Archaeological works were launched on 25 February and concluded on 29 March 2017. The season was carried out under the guidelines for archaeological excavations as defined by the Ordinance for Protection of Antiquities of 1999. The archaeological works at the site were preceded and followed by documentation works on objects from the Sudanese Antiquities Service's excavations at Wad Ben Naga, now kept in the collections of the Sudan National Museum.

The mission was headed by Pavel Onderka (field director), Vlastimil Vrtal (archaeologist), Alexander Gatzsche (conservator) and Juweriya Osman Mohamed Zain (inspector of the National Corporation for Antiquities and Museums). It further consisted of Jiří Honzl (archaeologist) and Gabriela Jungová (anthropologist).

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The works of the fourteenth season focused on [1] finalizing excavations of the so-called Typhonium (WBN 200), i.e. the temple of Mut (trenches T43, T44, T46, and T47, as well as T4 excavated during the third excavation season [Fig. 1]), [2] finalizing excavations of the cemetery WBN C200 (namely excavations of tumulus WBN C204; trench T45), and [3] the conservation of the Eastern Temple (WBN 500).



Fig. 1 Distribution of trenches excavated during the fourteenth excavation season of the Archaeological Expedition to Wad Ben Naga (Illustration: Vlastimil Vrtal).

Excavations of the Typhonium (WBN 200)

The Typhonium, or more precisely the temple of Mut at Wad Ben Naga (WBN 200), has been explored since the year 2011. So far only a limited amount of attention has been dedicated to the two side complexes located to the west and to the east of the open courtyard (or the temple garden; WBN 203) and the porticus (WBN 202) of the temple. Therefore, the works in the Typhonium during the present season focused on the eastern side complex, as well as on the eastern part of the transversal room adjoining the eastern side complex. In addition to this, the exploration focused on the area between the Typhonium and Kom H located to its west.

Trenches T43 & T47

Trenches T43 and T47 formed a continuum covering rooms WBN 206–208 (of the final numbering). The rooms form a separate complex accessible from the ambulatory (WBN 205) and from the porticus (WBN 202) [Fig. 2].

The northernmost room, WBN 206, was with all probability without a ceiling, as indicated by the fired brick casing of its walls and the exterior type of plaster, the remains of which are still detectable on the preserved lower parts of the wall. It served as one of the main communication hubs within the multi-roomed temple's structure. It likely represented a light well providing illumination for the adjoining rooms. This suggested function of the room is indicated by a drain which was set into the southeast corner of the room. The drain that ran through the thickness of the temple's outer wall was cased with fired brick. It is possible that the drainage might have been further furnished also otherwise. A similar drain is attested also in the Eastern Temple at Wad Ben Naga (WBN 504; cf. Onderka – Vrtal *et al.* 2013: 81). The room was most likely also used as a cooking place as indicated by several large vessels inserted into the room's floor.

The middle room, WBN 207, served as a vestibule (or a porticus) for the southernmost room. The passage between the rooms WBN 206 and 207 is indicated by a casing. A door leading to the southernmost room (WBN 208) is set in the eastern part of the vestibule's rear wall.

The southernmost room, WBN 208, was the largest one within the southeastern complex of rooms. Several large re-used vessels were, most likely secondarily, inserted into its original floor. A secondary floor on a higher level was identified: a staircase of two preserved stairs was built above a deposit layer (which reached the height of the threshold between the room and its vestibule). The baulks located within the room WBN 208 contained numerous large fragments of thinner bricks marked with three fingers used for the construction of vaults and to form cornices. These may indicate the nature of the roof above the rooms WBN 207 and WBN 208 as well as the design of the casing forming the passage between WBN 206 and 207. Another fragment of the pair statue of Amun and Mut (now Sudan National Museum, Inv. No. 36100) was discovered in the excavated baulks, together with a substantial piece of petrified wood. Numerous pottery finds included the bottom of a bread mould, fine ware fragments, as well as imports.

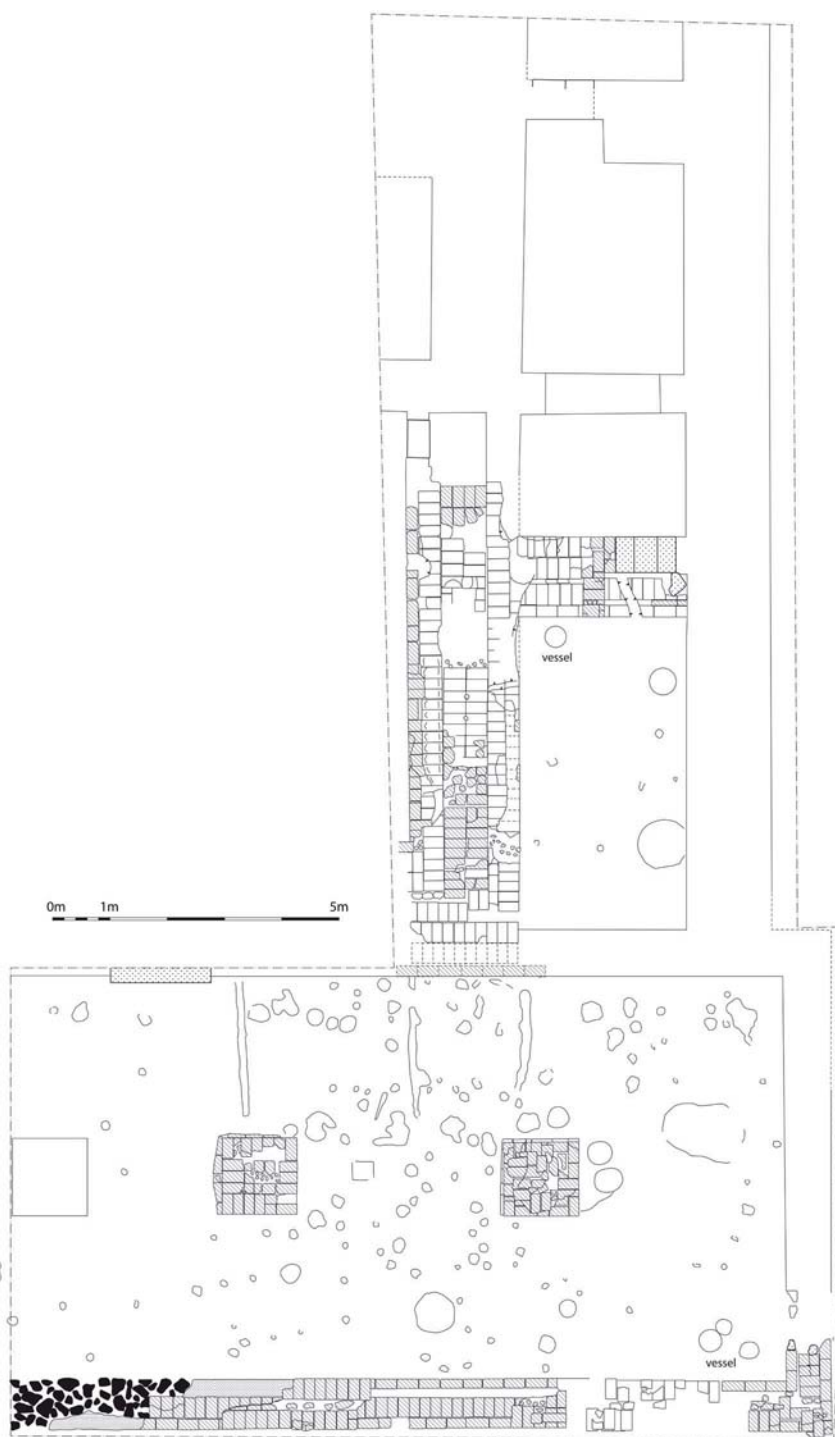


Fig. 2 Top plan of trenches T43, T46 and T47 covering rooms WBN 204 and WBN 206–208 (Illustration: Pavel Onderka).

Trench T46

Trench T46 was set to cover the central and eastern parts of the front transversal room (WBN 204). The aim of the excavations was to take apart baulks between trenches T7, T16, T18 and T23, excavated during previous excavation seasons and located within the above-mentioned room, and to explore and document the eastern half of this room in its entirety (*inter alia* by means of *Structure from Motion* digitalization method). The front wall of the room was examined in detail to identify the location of the front door (most likely leading to another unpreserved room located on the temple's axis). A base for one of the four pillars which originally supported the roof of the transversal room was uncovered within the intersection of the baulks. During the excavations of the baulks, several sandstone architectural features (a cornice section and fragments of the Bes pillars [?]) were discovered, raising the question if the transversal room was not equipped with Bes pillars similar to those known to have stood in the midst of the porticus (WBN 202) and the hall of offerings (WBN 201). The room was paved with a gravel and mud floor and numerous large vessels were discovered inserted into the original floor. To the south of the pylon, three grooves (ca. 2 m long and perpendicular to the pylon) were identified. They probably served for anchoring scaffolding used for construction of the pylon or subsequent application of plaster on the room's wall. In the area in front of the room WBN 204 a fragment of an altar (corner with a group of lotus flowers) was found.

Trench T44

The archaeological works further proceeded in the area between Kom A and Kom H, to the north of trench T38 examined during the previous season. Trench T44 (dimensions 10 x 5 m) was set in the area covering (what was assumed to be) the northwest corner of the Typhonium (WBN 200) as well as the open spaces between the Typhonium and structures WBN 250 (north) and WBN 800/Phase II (west).

The corner of the Typhonium's main outer wall was uncovered, with brickwork preserved up to the height of ca 1.6 m from the floor level. The walls of the inner room WBN 205 were plastered with well-preserved whitewashed mud plaster with a polychrome decoration consisting of: (starting from the base) a dark blue band, a frieze of interchanging lotus buds and flowers, and two yellow bands providing a base for the main register, of which almost nothing was preserved. Similar decoration on the lower parts of the walls was previously encountered in the main sanctuary (WBN 201) and the surrounding room WBN 205 (Onderka – Vrtal 2014; Onderka *et al.* 2014; Onderka *et al.* 2015). The original floor of the room was cut by two pits with painters' refuse (potsherds and pigment accumulations). From the fill of the room a large amount of diagnostic pottery and animal bones were retrieved, as well as a spindle whorl (SM17/097). These artefacts and ecofacts allowed a closer analysis of the chronology and activities that took place in the late temple. Some of the pots found can be dated to the final decades of the Meroitic kingdom.

To the north of the main wall and abutting it, a wall extended from the corner of the Typhonium towards the structure WBN 250, similar to the placement in the north-eastern corner (trench T36; cf. Onderka *et al.* 2017a). The wall framed a two-winged staircase opening from and leading into the structure WBN 250 (its original height was

estimated to ca 2.3 m; [Pl. 1]). A test pit was set in the platform of the staircase, aimed to retrieve anthropogenic material used as a fill and providing *terminus post quem*. Another piece of evidence for dating the construction of the building came from fragments of burnt wood resting on the staircase among destruction debris, which most likely came from the roofing of the room. The fragments were analysed and provided a calibrated radiocarbon date of 102 BCE – 29 CE (P=0.94). Absence of plaster between the main wall of the Typhonium and the staircase abutting it further indicates that the structure WBN 250 was built concurrently or shortly after the Typhonium.

To the west, the destruction debris from the main wall of the Typhonium covered a complex stratigraphic situation with several horizons [Pl. 2]: [I] The earliest horizon [Fig. 3, yellow] was represented by walls built of sandy mudbricks and pertaining to the structure WBN 700 that had been previously recorded under Kom H (trenches T28 and T29; Onderka *et al.* 2016; Onderka – Vrtal 2016), under the Typhonium (trenches T6, T9, T14 and T39; cf. Onderka *et al.* 2014; Onderka *et al.* 2017b) and in the open space to the west of it (trenches T37 and T38; Onderka *et al.* 2017b). However, proper understanding of the character of building activity in this period can only be approached after concluding archaeological research in the whole of the area.

The walls were later levelled close to their foundations and were covered with [II] a foundation layer of mortar, mud, pebbles and crushed bedrock. This layer supported the foundations of the Typhonium, a rectangular structure (dimensions 2.95 x 1.36 m) with sandstone casing and fired brick core (Fig. 3; Pl. 2, FEA 495), as well as two light walls made of clay mudbricks perpendicular to the western main wall of the Typhonium [Fig. 3, red]. The rectangular sandstone structure, aligned with the rear wall of the Typhonium, finds a counterpart in a podium-like structure unearthed in trench T9 and aligned with the front wall of the Typhonium (excluding the transversal room WBN 204; cf. Onderka *et al.* 2014). The function of both structures in the elongated open space immediately to the west of the Typhonium is yet unclear, although their connection to performance of rites seems a viable possibility, particularly given a possible opening in the southern part of the western main wall of the temple.

The foundation layer and one of the light walls were later cut by [III] a fired brick drainage, leading water from the area towards the north [Fig. 3, green; Pl. 2, FEA 516]. [IV] Another light wall was later built between the main wall and the stone structure, cutting the water drainage. On the wall, as well as on surrounding sections of the main wall of the Typhonium, whitewash was applied in at least two distinctive layers, showing long-termed use of the space. Another more substantial structure with fired brick casing was built to the north of the sandstone structure and directly on the bedrock [Fig. 3, blue]. Only the edge of the structure was covered by the trench, thus making its exact stratigraphic position unclear, although the destruction of the water drainage in its immediate vicinity might speak for a later date. The open space was gradually covered by trampled floor deposits (eventually up to 40 cm deep; [Fig. 3, Pl. 2, FEA 492]), containing several cooking vessel emplacements. The trampled floor deposits gradually covered the levelled structure with stone casing as well as all light walls, indicating a shorter time-span for their existence in comparison with the Typhonium; the destruction of which covered the top of the deposits eventually. In the uppermost sections of the fill, fragments of fine handmade vessels with figural decoration and a piece of a libation altar with lotus flowers (F17/001) were found, which indicate the nature of the surrounding space's use after the abandonment of the building.



Fig. 3a Top plan of trench T44 showing structures from several horizons of building activity: [I] yellow; [II] red; [III] green; and [IV] blue (Illustration: Vlastimil Vrtal).

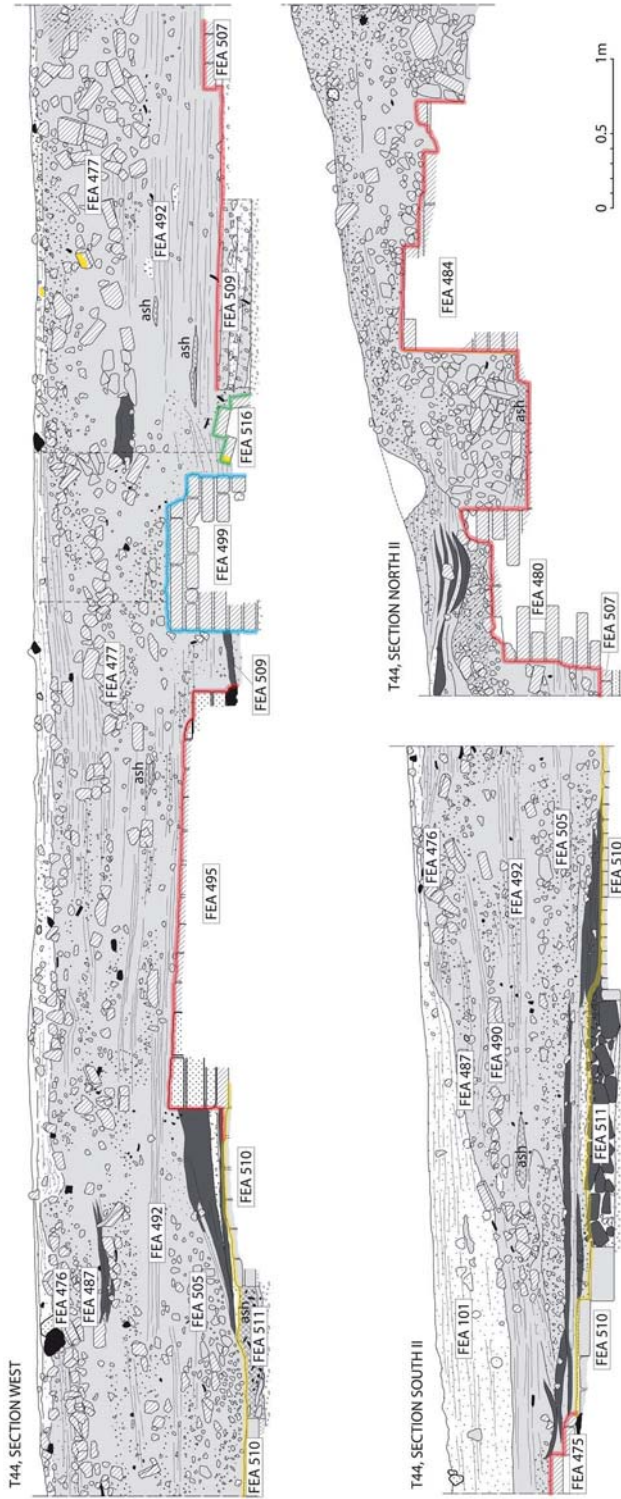


Fig. 3b Sections west, south and north in trench T44 showing several horizons of building activity (II) yellow; [III] red; [III] green; and [IV] blue) and subsequent destruction (Illustration: Vlastimil Vrtal).

Trench T4

The southern and western section of the trench T4 (excavated 2011; Onderka 2012) located in the open space between the Typhonium and the structure WBN 250 was prepared for documentation by the means of the *Structure from Motion* method. The sections show substantial destruction debris from the rear main wall of the Typhonium and underlying trampled floor deposits.

Excavations of the cemetery WBN C200 (T45)

Concurrently to the exploration of the Typhonium, works proceeded also with the exploration of the nearby cemetery WBN C200. The works focused on the largest tumulus of the group, WBN C204. It is located to the west of the three previously excavated tumuli (WBN C201–203). The excavations of the tumulus WBN C204 were begun during the thirteenth excavation season (Fall 2016); however, the burial pit had not been reached.

The superstructure of the tumulus WBN C204 (diameter 6.0 m; h. 1.5 m; [Fig. 4]) comprised of a mound built of local stones, fragments of fired bricks, several fragments of grinding stones as well as sand and soil. A fragment of an offering table was discovered in the lower levels of the superstructure. Animal bones (donkeys, ovicaprids, etc.) were included in the sand/soil fill among the stones and brick fragments. The size of the tumulus was set by a ring of large local stones. The burial pit, which is located in the southern half of the substructure, was covered by large stones, even some sandstone blocks, most likely originating either from the Typhonium (WBN 200), the so-called Isis Temple (WBN 300) or another structure located in the western part of Central Wad Ben Naga. The body laid to rest in the grave was semi-flexed, on the right side, facing the north, with its head to the east and legs to the west. Arms were semi-flexed with hands in the lap. No soft tissues were preserved. No artefacts which would belong to the

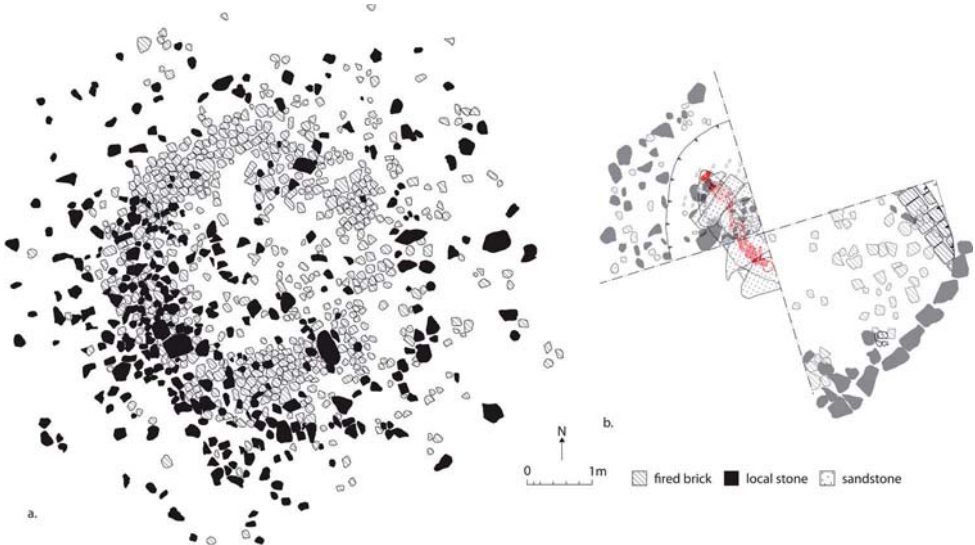


Fig. 4 Top plan of tumulus WBN C204; a. before excavation (left), b. after excavation (right) (Illustration: Gabriela Jungová).

funerary equipment of the deceased were discovered. The skeletal remains belonged to a male aged around 40 years.

Conservation

The conservation works focused mainly on the Eastern Temple (WBN 500) and the Typhonium (WBN 200). Consolidation of the Eastern Temple's walls proceeded: The preserved segments of the walls were stabilized by means of a reversible treatment. The wall segments were levelled using fragments from original fired bricks and modern bricks. Ancient and modern bricks were divided by geo-textile. The layer of modern bricks was capped with lime mortar. The wall segments were levelled into the same height in order to give the temple's remains a form that was presentable to the visitors of the site. As a part of the progressing restoration of the Eastern Temple, column drums from room WBN 501 were treated and consolidated against sand abrasion and torrential rains. Bases for the columns were either treated similar to the wall segments, or were built entirely anew (which was the case of the southernmost pair of bases). For the next excavation season, the lowermost column drums shall be placed on top of the reconstructed bases. The restoration of the temple ruins shall be completed in the coming, i.e. fifteenth, excavation season in Autumn 2017.

The conservation and partial reconstruction of the Typhonium (WBN 200) commenced during the season, as the archaeological works are close to being completed. The walls exposed during the exploration of trenches T43, T46 and T47 were treated using the procedure described above. The interiors of the rooms were filled with soil. The treatment is considered to be a testing one; a general conservation and restoration plan for the Typhonium shall be developed and discussed during the next excavation season.

After the completion of the excavations of the tumulus WBN C204, its superstructure was restored to resemble its original appearance.

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Pl. 1 Section of a staircase between the Typhonium (left) and structure WBN 250 in trench T44; a test pit through the platform can be noted in the centre, a fired brick drainage (FEA 516) can be noted on the top left (Photo: Vlastimil Vrtal).



Pl. 2a Trench T44 from the south; showing walls pertaining to structure WBN 700 (FEA 510), the exterior wall of the Typhonium (FEA 475), a rectangular structure with sandstone casing (FEA 495), trampled floor deposits (FEA 492), fired brick drainage (FEA 516) and section west. Mud plaster preserving the lowermost register of decoration can be noted on the top right (Photo: Vlastimil Vrtal).



Pl. 2b Trench T44 from the west; showing walls pertaining to structure WBN 700 (FEA 510), the exterior wall of the Typhonium (FEA 475), the staircase and the wall framing it on the west (FEA 480), a rectangular structure with sandstone casing (FEA 495), light walls perpendicular to the Typhonium (FEA 508 and 517), light wall cutting through the drainage (FEA 500) and trampled floor deposits (FEA 492) (Photo: Vlastimil Vrtal).