

BRAP BEAT



**Balu'a
Regional
Archaeological
Project**

BRAP 2026 Week Two

By Monique Roddy



Lo and Yaman heave a basalt stone from their excavation area (FN)

The ancient inhabitants of Balu'a used the best building material available to them: basalt stone. Basalt litters the landscape, from the towering columns of black stone that line the wadi (the results of an ancient lava flow from nearby Jebel Shiha) to the piles of stones that dot the fields around the site. We applaud the durable choice of the ancients, but when we face the collapsed ruins of their construction efforts, the basalt (which is too dense to easily shatter) becomes a logistical challenge. Each of our areas this week faced the monumental task of clearing, drawing, photographing, and then removing countless basalt boulders. Some smaller stones could be easily lifted by hand and chucked out of the square. Others required partnership to lift and heave. And then there were the behemoths that required careful strategy and the teamwork of eight or so people to lift into one of our strong-

webbed nets and carry out of the excavation areas. We've become experts at the movement of heavy stones, but we are left in awe of the engineering capabilities of the ancient peoples of Balu'a, who routinely moved and shifted into place boulders that far exceed our limited people power. Our reward, however, has been rich. Underneath those layers of collapsed stone we are identifying the surfaces where people once walked centuries ago. With equal care the floors of the homes we are excavating were once covered in thick yellow-brown clay or blinding-white plaster. On these surfaces we find sherds of pottery, fragments of grinding stones, a carnelian bead, glass bangle fragments, or the odd corroded metal tool. We learn about how the inhabitants moved through and used their spaces. The story is becoming more clear through the troweling and rock-shifting work of our dedicated crew.

Qasr North

By Jake Hill, Area Supervisor

Our second week of excavations at Qasr North continued to define the architectural layout of the possible administrative structure within our two squares. Our southern probe has revealed several courses of a large North-South wall. Our northern probe explored the continuation of this same wall to the north and exposed a doorway, opening into a likely casemate room to the west. Refining the GPS survey in the area helped us situate the architecture in these probes within the larger potential administrative structure.

The larger structure measures roughly 25 meters wide (E-W) by 50 meters long (N-S). The plan is of a “casemate” wall structure, with two walls around the perimeter of the structure and individual rooms within these walls. The large N-S wall excavated this week in both probes was likely the interior wall of this structure. The northern probe captures a casemate room west of this interior wall, with a southern dividing wall also exposed this week. Work in the coming weeks will expand this probe to define the relationship between the interior wall and the possible exterior wall to its west. The southern probe captures the eastern face of the large N-S wall. We plan to expand this probe south to evaluate a possible entrance to the complex.

In addition to articulating the architectural layout of Qasr North, this week we also hit our first phase surfaces! The rocky collapse below topsoil contained sparse Nabataean and Roman



Jake standing on the N-S Wall where it opens into the casemate room (IJ)

sherds, and predominantly Iron Age pottery. As we continued to excavate, we reached a large destruction layer across both excavation areas with heavy amounts of ash, stone debris, decayed mudbrick, and charcoal (likely remnants of fallen beams). In the northern probe the destruction debris fell onto a beaten-earth surface. In the southern probe, three parallel carbonized beams fell on top of a thick plaster surface. This phase dates to the Iron IIB based on preliminary pottery readings. Work will continue to define these surfaces and the layers below, especially in relation to the large walls.



Qasr North (FN)

The Islamic Village

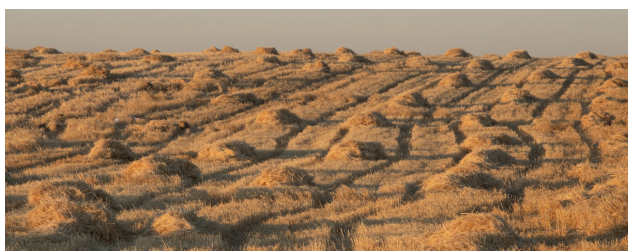
By Ian W. N. Jones, Area Director

After successfully removing backfill last week, work in the Khan in Week 2 began where the 2022 excavations left off. We spent most of this week carefully removing Phase 2 (Early Ottoman) features in Room K1—the raised pebble floor, bin or trough, and sump or soakaway—and excavating the lower plaster surface. At the end of the week, we began excavating the final Phase 2 locus, a compacted fill that provided a level surface for the later features we spent the week excavating. Next week, we will continue our work exposing Phase 3, the Middle Islamic II (1200–1400 AD) phase, which we reached only in small probes in the 2022 season, to explore the Khan's original use as an inn associated with travel through the Karak Plateau.

In the Bayt, we continued to work in Room B1 excavating through roof and wall collapse. This layer of collapse is substantial, as expected for a stone-roofed building, and it provides us with a very useful view into how the residents of the Islamic Village made use of earlier architectural elements and stone artifacts quarried from earlier phases of the site in their construction. Although our pottery readings continue to indicate a Late Islamic period date for the context we are excavating, we are seeing many more residual sherds of the Nabataean, Roman, Byzantine, and Early Islamic periods here than in the Khan, suggesting a more substantial earlier occupation in this area. Next week, we will continue our excavation of the collapse with the goal of reaching occupational surfaces below.

Our excavations in the Islamic Village are also right next to fields of barley cultivated by

Goats grazing on barley stubble (IJ, top) and harvested wheat fields south of Balu'a (FN, middle)



local farmers. This week, during our breaks from excavating, we have also been watching these farmers harvest and collect this grain by hand and graze goats on the remaining stubble, providing a fascinating contrast to the larger, mechanically-harvested wheat fields south of the site. It is not every season that we get this sort of window into the lives and livelihoods of the community that graciously hosts us, and it has been a privilege for the Islamic Village team to be able to see the harvest in person this year.



Documenting surface removal at the Khan (MR)

New Tech for BRAP 2026

By Kent Bramlett & Monique Roddy

Archaeological projects record detailed site plans, maps, and the measurements of every locus and feature. Up until a generation ago, project teams included a draftsman to draw scale plans of all the architecture. Measurements were taken by tape measure and dumpy level, and as newer survey equipment became available, total stations became widely used. Following the introduction of Global Positioning System (now generally known as Global Navigation Satellite Systems), new methods of precision x, y, z, coordinate measurement became possible. These systems use corrections provided from precisely located base stations, including those provided by ACOR, that allow the units in the field to achieve centimeter level accuracy. The data is then imported to software that maps all the positions and displays the architectural plans, object find locations, and earth levels digitally. This field is called Geographic Information Systems (GIS).

This year, BRAP is moving from a Leica GS14 RTK GNSS Smart Antenna system, which we've used since 2019, to Emlid products. While the Leica is a sophisticated and accurate instrument, it requires a bulky data collector and dedicated team member. The Emlid Reach RX and RX2 units, by contrast, provide the same degree of accuracy but allow us to collect data with our phones. With one unit on loan from Matthew Vincent (ACOR) and one recently purchased for the CNEA, we are able to capture data quickly for both areas of excavation this season.

For the lab we brought along the Laser Aided Profiler (LAP), a new pottery scanner designed by archaeologists in Slovakia and increasingly adopted by international projects. The CNEA acquired one last year and Sarah Watson (archaeology masters student at La Sierra University) has become proficient in using it to scan the diagnostic pottery and produce the pottery plates we use in our publications. During our Wednesday evening lecture Sarah demonstrated the LAP's ability to snap in pottery rim profiles and images with the click of a button in minutes. This is a great improvement over the older, slower pottery scanner, and a far cry from the old slice and draw method that kept a buzz saw busy in years long past! Our goal is to have all of the publishable pottery digitized by the end of the season.

In both the field and the lab we are using a new and improved version of OpenDig, a digital documentation system first developed by Matthew Vincent in 2007, deployed to the field in 2011, and continually improved since. This season OpenDig maintains its strength in converting the extensive paper locus records to a digital platform, while adding a new user interface and a new finds tracking system that allows us to follow every find from the field – object or sample – from the moment it is retrieved through to its processing in the lab and eventual location in Jordan or with a specialist abroad. This past academic year three students from Walla Walla University's Computer Science Department (Andrew Flerchinger, Paul Hartman, and Jenessy Lustre) worked with Matthew on the user interface, gaining experience on an active platform for their senior project.



Ian Jones & the Reach RX (MR)



Sarah Watson using the LAP



Zainab Hweij using OpenDig (MR)

A Nabatean Platform at Balu'a

By Friedbert Ninow, Director

While the early history of the Nabataeans remains shrouded in mystery, they emerged gradually as nomads and traders (especially in incense) moving from the Arabian Peninsula into southern Jordan, and eventually into the Southern Negev and further north up to Damascus. Their kingdom reached its greatest extent in the first century AD, a period during which they also left traces at Khirbat al-Balu'a.

Already early on, archaeologists noted Nabataean presence and cultural remains at Balu'a, especially in the vicinity of the qasr. Nelson Glueck, who visited Balu'a during his 1933 survey of Eastern Palestine, concluded upon examining the walls and immediate vicinity of the qasr, and the large amount of Nabataean pottery, that eastern extensions built against the main walls of the qasr should be dated to the Nabataean period.

J. W. Crowfoot explored Balu'a just a few months later and excavated a couple of probes, including in the eastern extensions of the qasr. These eastern extensions had been constructed of large basalt and limestone blocks. He discovered a doorway with a threshold – roughly 1.70 m across – with a long limestone slab which may have served as a lintel. In another small excavation against the north wall he found glass fragments and Nabataean pottery.

New excavations at Balu'a by Friedensau Adventist University (Germany) in 2008 turned to an overall study of the occupational history of the site. Illicit digging in Crowfoot's probes left scattered Nabataean pottery sherds and exposed wall lines and other architectural features. During the 2008 season a number of squares were opened opposite the eastern entrance to the qasr. Excavation revealed a stone structure of rectangular shape which has been interpreted as



The Nabataean platform east of the qasr (FN)

an altar platform. A closer examination revealed various building phases: in its first phase, the altar platform consisted of a quadrangle of 3.20 x 3.20 x 3.30 x 3.10 m. The stones were carefully hewn and the side walls covered with plaster. In a second phase, the altar was enlarged slightly to the south and west and more extensively to the north and east. The area between the extensions was filled with fieldstones; the walls themselves consisted of hewn stones that were also covered with plaster. Some of the plaster fragments recovered were colored. In a third phase, a stairway was added at the northern side of the altar and a small podium/bench was built in front of the western wall. Ashes and bones were found in the immediate vicinity of the altar. Based on the pottery associated with the structure it could be dated to the first century AD. Various parallels at Petra, Khirbet et-Tannur, and other places attest to this type of Nabataean altar/platform.

A Tour of the Moabites

by Monique Roddy

Our second weekend tour took us around the territory of the ancient Moabite kingdom. We drove north past Balu'a and into the Wadi Mujeb, a dramatic canyon that divides the western half of Jordan and makes for a harrowing driving experience (albeit one with views!). Our little bus got us safely through and then around a circuit of sites with Iron Age Moabite settlements, including Dhiban, Ataruz, Lahun, and Mudaybi. We included a stop at the UNESCO World Heritage site of Umm er-Rasas, renowned for its 8th century Church of St. Stephen. The detailed mosaics in this church feature cities from throughout the region.

The complex at Ataruz (MR)



View of the Wadi Mujeb from Lahun (MR)



The view from Mudaybi (IJ)



In front of an Iron II gate at Lahun (MR)

