



HUNTING FOR INFRASTRUCTURE

Insights from the 2025 Kites in Context Field Season

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Methodology

Kites in Context (KiC) is a multi-year project investigating the thousands of hunting traps known as “desert kites,” found throughout Jordan’s Black Desert. The project seeks to provide novel insights into the chronology, function, and social role of this early hunting infrastructure.

KiC focused on two objectives in 2025. One was to build a database of 3D models, Digital Elevation Data, and ortho imagery of sites and features using drone imagery. This digital mapping enables greater contextual comparison across the extensive network of kites, allowing investigation of kite construction and function relative to local topography and the human-built environment.

The second major focus was survey and excavation at Bakhita, a remote and archaeologically unexplored area approximately 2 hours south of Ruwashed, Jordan’s easternmost town. We selected Bakhita for excavations in 2025 due to its high concentration of desert kites and other structures, as we were eager to investigate the relationship between the two.

Over the 5-week field season, the team excavated one large Neolithic structure (B-1) in addition to parts of one well-constructed and one incomplete kite. These excavations sought to procure dates for the kites and associated structures—by way of OSL samples, datable artifacts, and faunal remains—in addition to uncovering evidence for kite cell function. We hoped to place our Bakhita investigation within the greater context of regional Neolithic hunting and herding networks through our drone mapping.

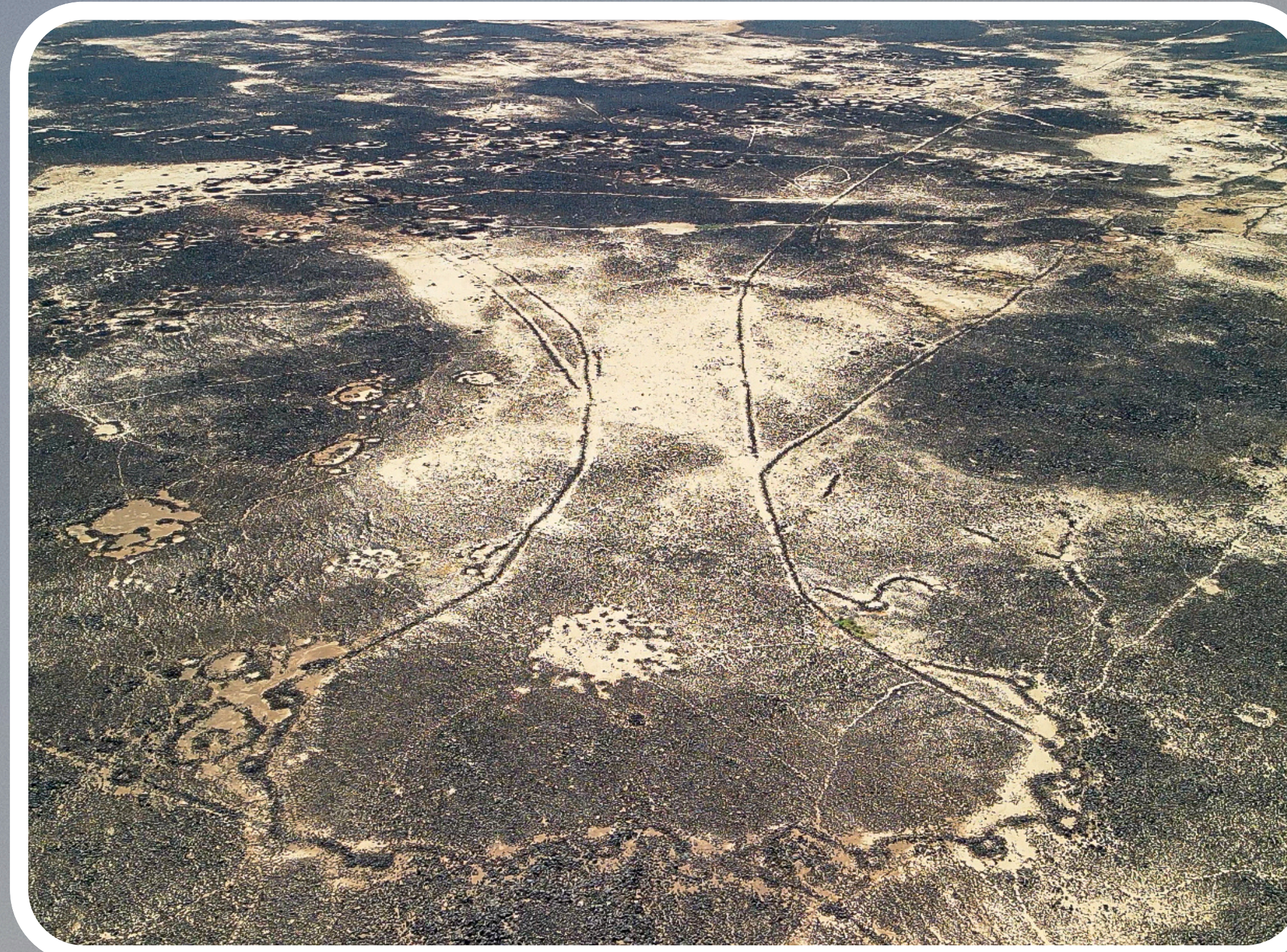


Bakhita and Kites in Context

Desert kites consist of three primary elements. (1) Long, low-lying, basalt guide walls, sometimes stretching for several kilometers, funnel game, primarily gazelle, into (2) basalt enclosures flanked by (3) smaller stone cells. We are gathering data to determine how each kite element functioned.

At Bakhita, we excavated two cells from two different kites to better understand kite construction. The first kite, KiC 1-31, was well preserved and near the concentration of structures at Bakhita, including Structure B-1. We selected cell No. 10, bisected it, and excavated half. Both the front and rear boundaries of the cell were clearly defined, as was the depth of the cell, with the deepest section directly behind the front wall, which intersects with the kite enclosure.

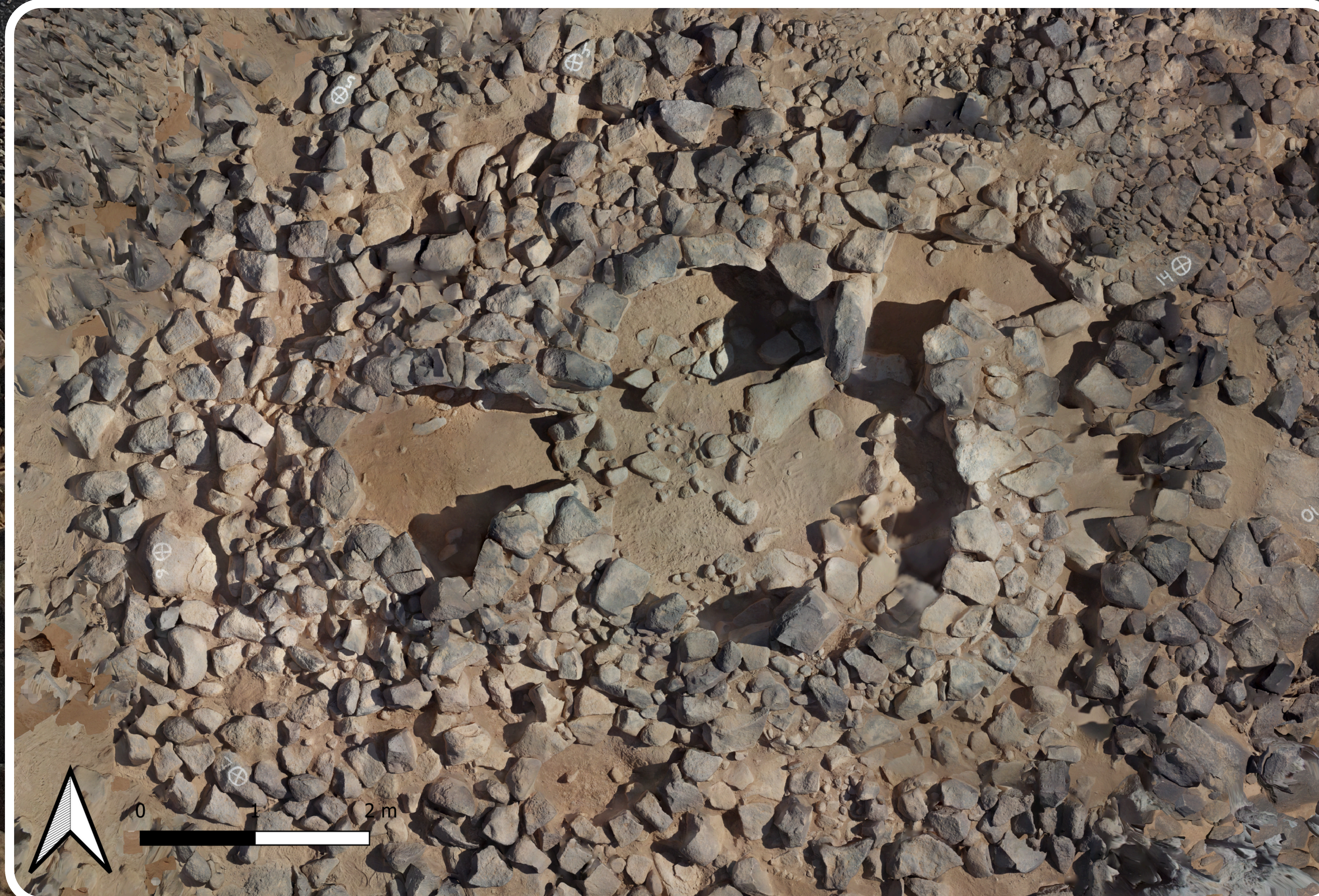
The second kite, KiC 1-32, was chosen because of its unusual appearance. Although clearly kite-shaped, the cells and the guide walls are absent. We selected cell No. 1, bisected it, and excavated half. Shallow with only a single course of stone, it appears to be an unfinished kite, which we hope to date with OSL.



Excavation of B-1

Excavations during the 2025 field season centered on Building 1 (B-1), which was selected because it was large and covered in a thick layer of collapsed basalt, promising preservation of features and sediment. Two roughly circular features visible below the collapsed stone hinted at architectural integrity, and external features appeared similar to a Late Neolithic platform found at Wisad Pools.

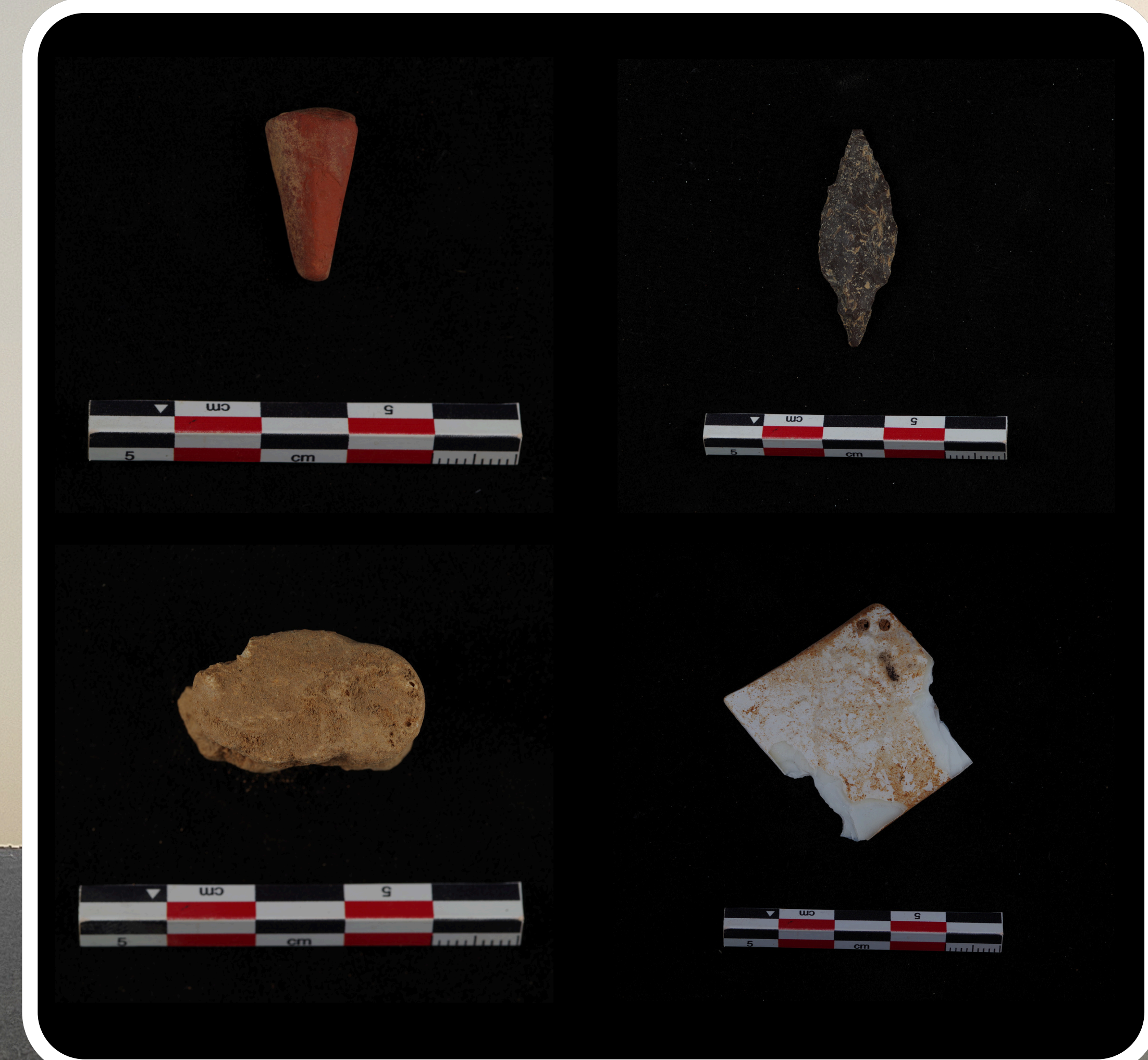
Excavation of B1 revealed three distinct phases of construction. The **Late Phase** divided the internal space with extremely large upright slabs, defining an alignment in the cell’s center. To the east, an apparent alcove was delineated, while an earlier western cell was blocked by a large basalt slab originally shaped to fit against the threshold stones. This west cell was filled with basalt cobbles, apparently during the middle phase. In the main cell, the **Middle Phase** included paving stones against the southwestern wall interior. Across this area, a layer of small fist-sized stones was strewn across the interior. Below the alcove in the main cell, a well-defined entry was exposed to the northeast. This entry is unusual, featuring a corner that turns and redirects a person to the south, to the main cell. The **Early Phase** had fewer constructed features in the main cell, but a hard-packed surface extended across the western interior, connected to a hearth located in front of the western cell threshold. An additional hearth was found with plentiful charcoal, ash, and a flat layer of small heat-cracked stones. The earliest phase in the west cell is represented by two sequential layers. The upper layer is a hard-packed surface confined to the area closest to the main cell, similar to the hard-packed surface found in the main cell at this level. Below this, a stone-outlined alcove had been cleared of extremely fine ash, found distributed across the western cell.



Material Culture

Excavation of B-1 revealed significant material culture. We recovered:

- hundreds of pieces of flint debitage and tools (particularly burin spalls and drills);
- 22 chipped basalt flakes and a few flaked basalt tools
- 122 beads, 62 bead blanks, and unmodified bead-making material, including carnelian, dabba marble, and red limestone;
- a few projectile points from the structure, and a few from nearby surfaces;
- a few pieces of mother-of-pearl, including a pendant and a bead;
- an unusual red cone-shaped object, likely made of ochre;
- a very thin, flat, unknown material coated on one side with what appears to be red paint.
- A small assemblage of animal bones, including some gazelle remains



Conclusion

The third season of the Kites in Context project helped further clarify our understanding of both kite construction and the buildings affiliated with kites. The kite cells excavated during the 2025 season at Bakhita showed a different construction style from those excavated in our previous two seasons at Wadi Mahdath. Further investigation is needed to understand the differences in function and use of the different kite cell configurations. Structure B-1 exhibits multiple phases of use, including as a likely residential structure during its earliest phase. The artifacts recovered in B-1, and evidence for the consumption of gazelle, link the hunting groups at the eastern edge of the badia with the domestic structures and the hunting traps. The 2025 season of Kites in Context showcases the importance of continuing our efforts to understand the social contexts in which the kites were built and operated during this significant period of expansion into arid environments.

