

PRELIMINARY REPORT ON THE 2023 SEASON OF EXCAVATIONS AT KHIRBAT AṢ ṢAFRĀ

Paul Gregor, Paul Ray, Robert Bates, Constance Gane, Trisha Broy and Talmadge Gerald

Introduction¹

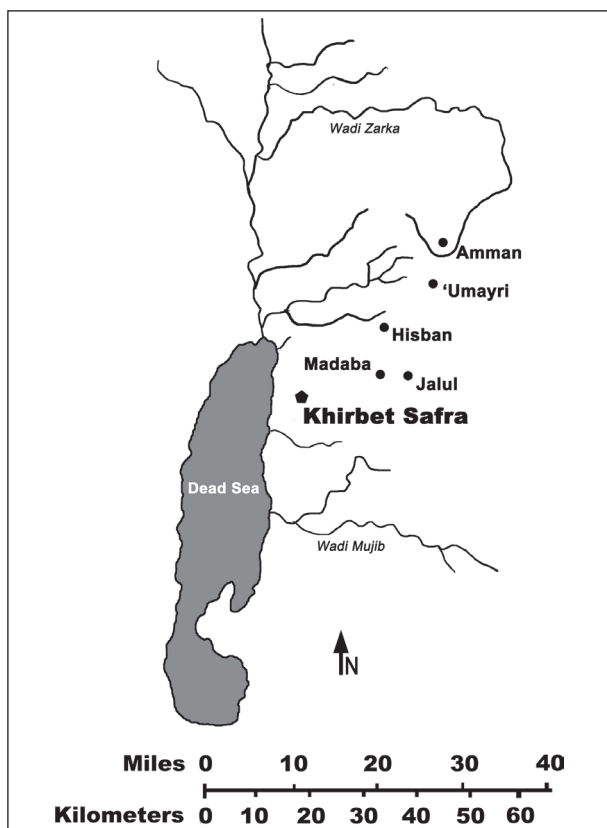
Andrews University conducted its fifth season of archaeological excavations at Khirbat Aṣ Ṣafrā from June 7-26, 2023. The excavations were directed by Paul Gregor of the Institute of Archaeology at Andrews University, with co-

1. We wish to thank HE Fadi al-Balawi, Director General, and his staff at the Department of Antiquities of Jordan for their support of the project during this season. Also, we would like to express our appreciation to the Director of the Madaba Antiquities Directorate, of the Department of Antiquities of Jordan. In addition, we would like to thank Pearce Paul Creasman and Helen Malko of the America Center of Research (ACOR) for their usual assistance. Furthermore, we appreciate the help of Dr. Shadi Ali Ibrahim Al-Hraut and Yasser Hashem Salem of the Department of Antiquities of Jordan, who served as our department representatives in 2023 season. Finally, we wish to thank Matthew Vincent from ACOR with GIS assistance and other aspects of his technical expertise.

Staff for the 2023 season included Paul Z. Gregor as director. Paul Ray served as object registrar, with the help of Stefanie Elkins-Bates, Elizabeth Emswiler, Jeffrey Hudon, Daliyah Hudon, and David Glazer. Trisha Broy served as pottery registrar. Robert Bates served as technical advisor, dealing with the electronic database and iPad issues. Archaeobotanical specialists Annette Hansen and Frits Heinrich from the FOST Lab, Vrije Universiteit Brussels, did on-site botanical analysis with the team this season. The Square supervisors for Field A were Ramon Wiens, Carina Prestes and Abalardo Rivas; for Field B they were Elizabeth Emswiler, and Eva Glazer; for Field C they were Hala Ajilat, Daliyah Hudon, and David Glazer; for Field D they were Ryan Wilson and Nathaniel Brumbaugh, Jeffrey Hudon, and Scottie Baker, and for Field E they were Sergey Panfilov, and Christie Chadwick. Volunteers included Georg Filippou, Anna Filippou, Andreas Filippou, Anthony Lavea, Toa Fio, Hyoukgu Kim, SeKwang Seo, Yo Han Song, Johanna De Haven, Lori Gregg, Miguel Rodriguez, Adrian Santago, Diala Michael, Robert MacKay, Arnie Baker, Lora Baker, Daniel Brown, Natalia Brown, Daniel Gil, Sergio Gil, Adam Hamstra, and Jonathan Ramos.

director Paul Ray, Robert Bates, Constance Gane Trisha Broy and Talmadge Gerald functioning as Field Supervisors. About forty-three faculty, specialists, students, and volunteers were joined by ten Jordanian workers during the excavations this season.

Since 1992, Andrews University has been conducting excavations in Central Jordan as part of the Madaba Plains Project, at the site of Tall Jalūl, near Mādabā, with Phase I excavations at the site, ending in 2012. More recently, excavations are being carried out at the site of Khirbat Aṣ Ṣafrā. A surface survey was conducted in the summer of 2017, with physical excavations at the site in 2018, 2019, 2021 and 2022, followed by a fifth season of excavations in 2023. For background information on Tall Jalūl, the Jalūl Islamic Village, and the history of the excavations at the site, see Gane *et al.* 2010; Gregor 2009; Gregor and Gregor 2009, 2010; Gregor *et al.* 2011, 2012, 2017; Herr *et al.* 1994, 1996, 1997; Younker *et al.* 1993, 1996, 1997, 2007; and 2009; Younker, Gane and Shqour 2007; Younker and Merling 2000; and Younker and Shqour 2008. For a report on the Khirbat Aṣ Ṣafrā Survey, in 2017, and a history of earlier research in the immediate region, see Gregor 2021. For a preliminary report on the first season of excavations at Khirbat Aṣ Ṣafrā, in 2018, see Gregor *et al.* 2021; on the second season of excavations in 2019, see Gregor, Ray and Moody 2022, on the third season of excavations in 2021, *cf.* Gregor *et al.* 2022, and on the fourth season of excavations in 2022, *cf.* Gregor *et al.* 2025: 57-67.



1. Regional Map.

Results of the 2023 Season at Khirbat As Safrā

Khirbat As Safrā is an approximately 2.6-acre site, located southwest of Mādabā, overlooking the Dead Sea (Fig. 1). The site was occupied beginning in early Iron Age I and was continuously inhabited into early Iron Age II, after which it was abandoned until the Byzantine period, when it was lightly occupied.

Excavations, this season, took place in all five fields (A, B, C, D and E) on the site. Each excavation square was opened, using a GPS on a grid of 6.0×6.0 m squares laid over a topographic map created by the Department of Antiquities surveyors during the survey season, in 2017 (Fig. 2).

Fortification System

Khirbat As Safrā, as the name suggests, has exposed ruins with a casemate-type wall system, surrounding the perimeter that has been found in four of the excavation fields (A, B, C, and D) on the site. The casemate wall system is divided into broad room compartments, integrated into rectangular-shaped buildings that extend into the settlement. The walls,

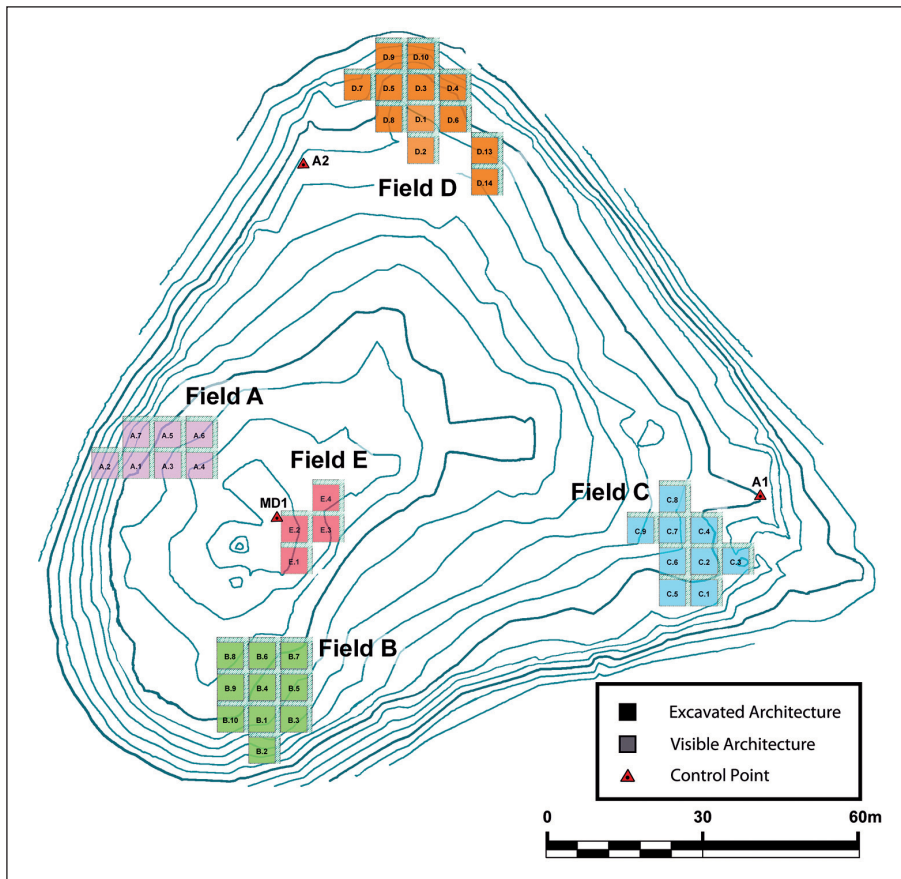
which were built directly upon uneven bedrock, with various-shaped crevices, are freestanding. A level surface for building the walls and laying the earliest floors was created by filling in these crevices with a densely packed, sterile, red brick-like material. The site itself is entered via a gate structure, also dating to the early Iron Age I, at its northern end (Fig. 3).

Field A

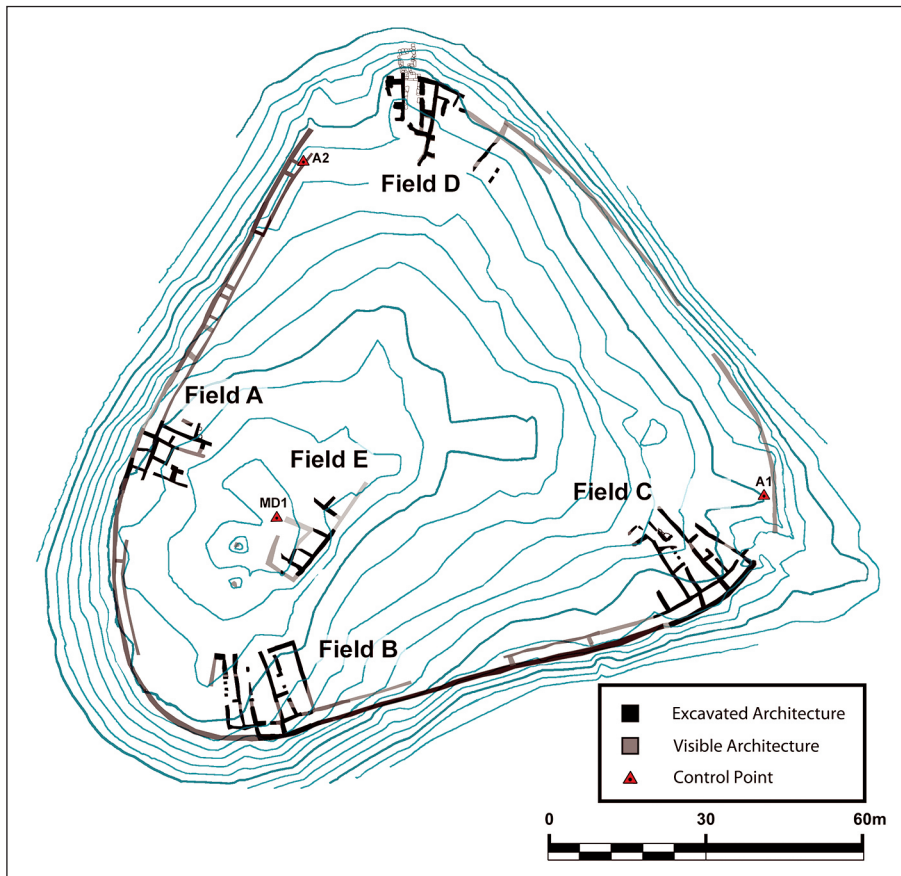
Field A lies on the western edge of the site, and as in the 2018 and 2022 seasons, it was supervised by Constance Gane. Excavations this season focused on parts of two squares (A3 and A5), which were re-opened, and a new square (A7), opened in another segment of the casemate wall. Bedrock was reached in Squares A3 and A5.

The casemate fortification wall system, uncovered in Square A1 in 2018, was built directly upon bedrock (Fig. 4). Uneven portions of the bedrock were leveled, using a densely packed, red-bricky material. The outer wall (A1:4) was two-rows thick and built with large field stones, chinked with smaller stones. The inner casemate wall (A1:3) was only partially exposed, as part of it remains in the eastern balk of the square. The inner wall was only one row thick. An east-west cross wall (A1:5), also one row thick, connected the outer and inner casemate walls, creating two rooms. No passageways were discerned that would have allowed access from the long rooms into the casemates. The room to the north of the cross wall (A1:5) was bounded by a northern wall (A1:17). The casemate fortification wall was further defined this season, with the opening of Square A7. The outer casemate wall A7:1 is a northward extension of the outer casemate wall of A1:4. The inner casemate wall A7:2=A3:41=A5:36 is a northward extension of the inner casemate wall of A1:3. East-west cross walls, A7:3 and A7:4, north and south respectively, created a room that has so far yielded two hard-packed plaster surfaces (A7:6 and A7:7).

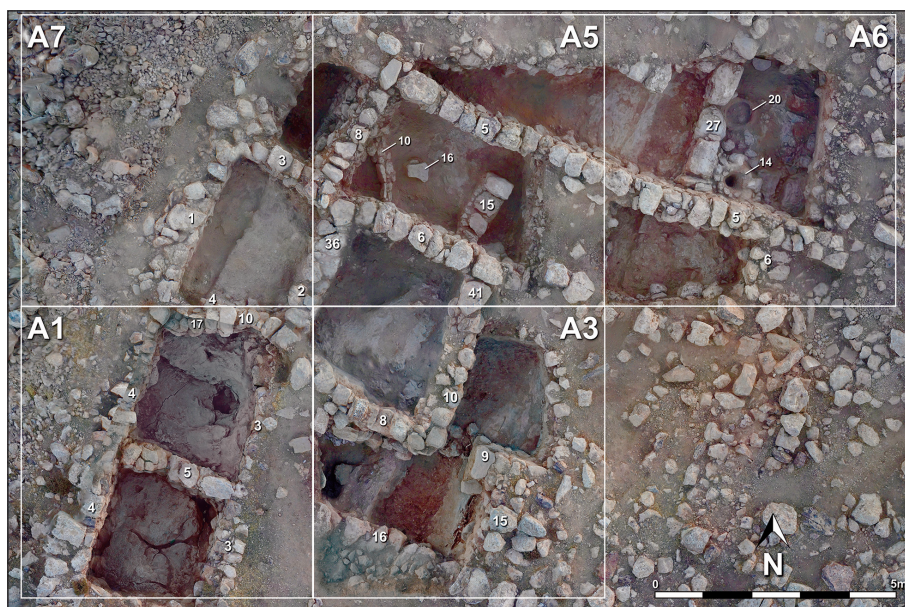
Based on the 2018 data, there appears to have been at least two occupation levels within the two rooms of the casemate walls in Square A1. Early Iron Age I ceramic remains were found directly upon the bedrock (A1:14) in



2. Topographic Map of Khirbat Aṣ Ṣafrā with Excavation Fields.



3. Topographic Map of Khirbat Aṣ Ṣafrā, with excavated and visible architecture.



4. Field A.

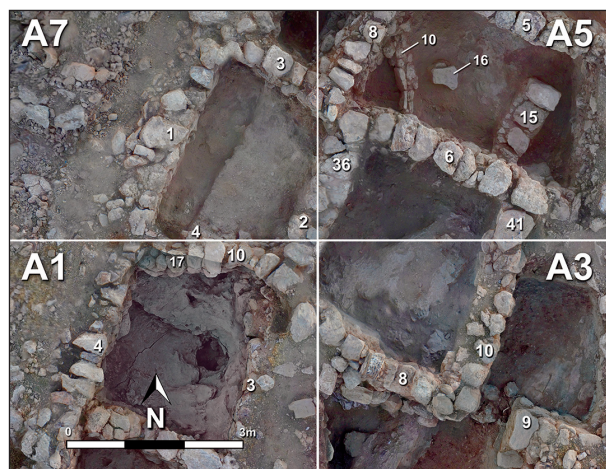
the northern room. Directly above this pottery, was the hard, red-bricky material, as well as ash, *nari*, and rocks. An Iron Age I beaten earth surface (A1:11) was found above this debris. A parallel beaten earth surface (A1:9) was found in the southern room above the bedrock and bricky fill (A1:15). Ceramic remains indicate an Iron Age I occupation for this surface. Numerous animal bones, stone grinders and pestles were also found as well as large pockets of ash. Above this surface a mixture of Iron Age I, Iron Age II and Byzantine ceramics indicate possible subsequent occupations. However, due to an earthquake, the later occupation levels are impossible to detect. What may have been hard packed earth surfaces are discernable, but they undulate and are mixed with debris and tumble from the surrounding walls. The casemate walls lean to the west. What appears to have been the mudbrick superstructure collapsed into the rooms from the west, indicating a violent disruption to life here.

As mentioned above, the excavation of Field A begun in 2018, focused on Square A1 and parts of Square A3. It was then left untouched until the 2022 season, at which time part of Square A5 and all of Square A6 were excavated, with the results confirming that the initial occupation of this part of the site began in early Iron Age I and continued into Iron Age II, being followed by a long period of abandonment, and then reoccupied in the Early Byzantine period.

In 2023 the previously unexcavated parts of

Squares A3 and A5 were completed (Fig. 5), providing further evidence of a Byzantine period presence, with a remnant of the early Iron Age I occupation. The earliest phase (IV) of occupation dates to early Iron Age I and is located within an area bounded by the inner casemate wall (A3:41=A5:36=A7:2) of the broad room, to the west, and the northern (A5:6) and southern (A3:27) walls that formed a long room that extended into the settlement. Here, early Iron Age I pottery was found on top of the sloping bedrock surface (A3:40=A5:42).

In the next phase (III), when this part of the site was reoccupied during the Byzantine period, after a long hiatus, the new occupants removed much of the earlier Iron Age structures and likewise founded their own on bedrock (A3:40=A5:42). Here, little was found besides



5. Field A squares excavated in 2023.

some Byzantine-period pottery on bedrock and inside the pits (A3:34 and 35) and cavities within it. Whatever else might have originally been there, this occupation ended with a major conflagration, which left a thick ashy layer (A3:37=39=44=A5:38=39) that covered the entire area. This material correlates with the thick (up to 50 cm) ash layer found above the plaster floor (A3:21) in the portion of Square 3, excavated in 2018. Numerous ceramic vessel fragments of cooking pots, jars and bowls were found in the earth and thick ash remains. In addition, a wide variety of stone food-processing implements were found, including loaf-shaped grinders, pounders, pestles, a fragment of a kern and whetstones.

During the subsequent occupational phase (II), a *tabun* (A3:38) was built into and above the ash layer, on a foundation created with a few stones and large pieces of pottery. Its opening at the top measured 70cm. Several large fragments of cooking pots were found in the debris next to the *tabun*.

The final occupational phase (I) presents an unusual use of space. Presumably to make the area as flat as possible, a plaster layer (A3:30=33=36=43=A5:35=37) of various thicknesses was laid down, overlaying the *tabun*, the ash layer, and the bedrock, with its pits containing earlier material cultural remains. The highest level of the plaster was against the southeastern corner of the southern wall (A3:8=27) of the room, and sloped to the north, but did not reach the northern wall (A5:6). At this time, a new room was created by the addition of a Wall A3:10 on the east. A second row of stones (Wall A3:8) was also added on top of and on the north side of the Iron Age I southern wall (A3:27).

Above the layers of plaster (A3:30=33=36=43=A5:35=37), were post-occupational debris consisting of massive boulders and rock tumble, plausibly the result of additional tectonic activity from one of several earthquakes that occurred during the late Byzantine and the early Islamic period.²

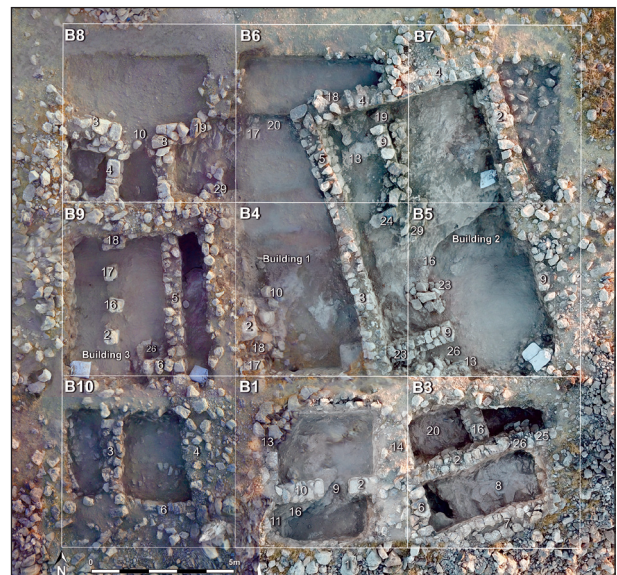
2. Perhaps the earthquake that destroyed the church of St. John the Baptist and the Monastery of St. Euthymius at the Baptism Site along the east side of the Jordan River, just north of the Dead Sea in 659/60 AD or the great earthquake of 748 AD which affected most of the Near East from Egypt to Mesopotamia, cf. Russell 1985: 39, Table 1 and 46-49.

The casemate room in Square A7 was only partially excavated. Nevertheless, the initial results yielded evidence of two possible plaster surfaces (A7:6 and A7:7) that may correspond to the plaster layers of the final occupational phase in Squares A3 and A5, dating to the Byzantine period. However, further excavation is necessary to confirm such a relationship.

Field B

This season, two new squares (B 9 and 10) were opened and partly excavated on the southwestern edge of the site, in Field B, supervised by Paul Ray. Another square (B8), partly excavated in 2021, was completed this season. In addition, the east balk of Square B8 was removed to help clarify the relationship between Buildings 1 and 3 (see below).

Excavation in Field B was begun in 2018. As in other parts of the site, crevices in the bedrock were filled with a hard, red-bricky, material in preparation for the initial occupation of this part of the site. During the first three seasons (2018, 2019, and 2021) two rhomboid-shaped structures (Buildings 1 and 2, **Fig. 6**), narrowing in width from south to north, and laid out over three bedrock terraces, have been almost completely excavated, both being incorporated into the casemate wall system which functions as the broad rooms of the structures. The remaining parts of these buildings consist of two long rooms, one, on the eastern side (2.70-3.60m wide, inside space), functioning as a



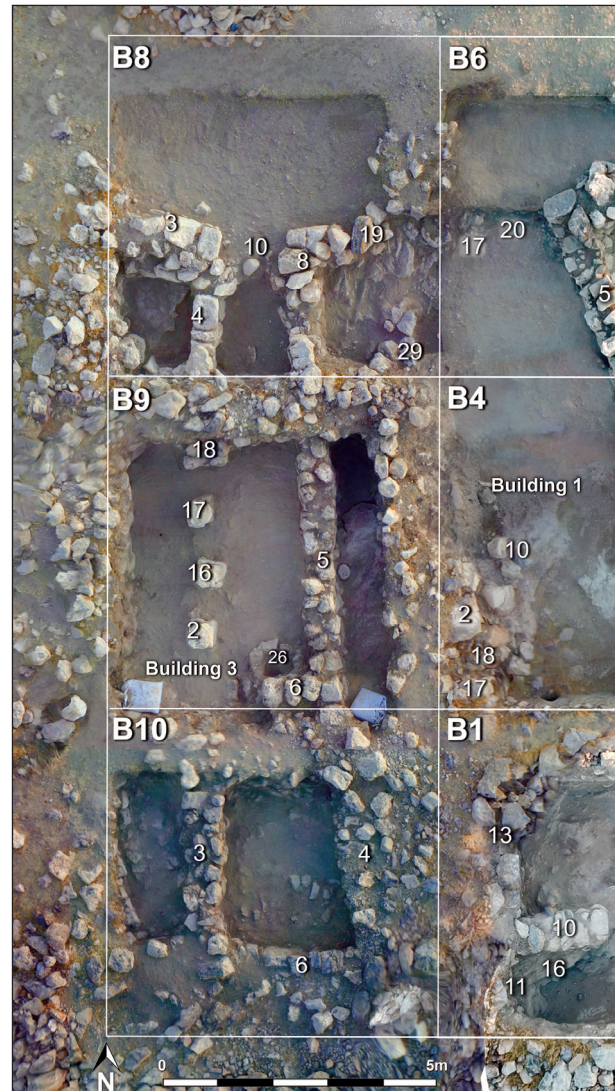
6. Field B.

“courtyard,” into which, are entrances from the broad room casemates. The second long room (1.70-2.80m wide, inside space), on the western side of the buildings, was further subdivided, as needed, into smaller spaces. The entrances to the buildings are on the north side, opposite the casemate broad rooms. Both buildings thus form traditional three-room house structures. Their lengths vary between 15.70 and 16.20m, with total widths as wide as 7.10m and as narrow as *ca.* 5.90m. The walls of the buildings vary from 0.60-0.80m wide, preserved in some places as high as six or more courses. Of the two structures, Building 2, on the eastern side of the field, is the best preserved. These buildings date to Iron Age I and existed until sometime in early Iron Age II, when they were destroyed, as was the rest of the site, by an earthquake.

Part of a third building, to the west of Building 1 (**Fig. 7**), was excavated in 2021, and continued this season. Previously, it was thought (see the 2021 preliminary report) that Building 1 was a two-room house (one long room and one broad room), with a postern entrance on the west, possibly leading either into an alleyway between the buildings or else directly into the building to the west. Hence, it was thought that the “western wall” of Building 1 was not shared with the new building to the west. We no longer believe that to be the case (see below). Instead, Wall B1:11=13=B4:2=17=B8:29 is now understood to be the wall line of the subdivided sections of the narrower long room of Building 1.

The outline of Building 3, as excavated so far, includes the east wall (B8:8=B9:5=B10:4), constructed with a single row of stones, 0.70-0.80m wide, that is shared with Building 1. It is 16.20m in length and preserved for up to five courses in places. The unexcavated western wall of this building can be seen just above the current surface, outside of Square B8, and awaits future excavation. This wall runs on a slightly oblique angle, due it would seem, to the topography of the site, which begins to turn in a semi-circle to the northwest at this point (see **Fig. 3**). Hence, it deviates from the pattern of Buildings 1 and 2. Along these lines, at least on the north end, the building is somewhat narrower than the other buildings excavated so far. Like the other structures, Building 3 is subdivided, but on the

east, the opposite direction of that of Buildings 1 and 2, into a 1.70m wide long room, further subdivided into three spaces, with two rooms, one on either end. The one on the north consists of Walls B8:4=B9:18, B8:10; the entrance to



7. Field B squares excavated in 2023.



8. Field B Building 3: Pillared section of long room.

the building, and Wall B8:8, the second one consisting of Walls B9:6; B10:3, 4 and 6, on the south. In between, are three stacked pillars (B9:2, 16, and 17; **Fig. 8**). The remains of these pillars consist of two-three courses, reaching heights of 0.60-0.90m. A stone-lined installation (B9:26), possibly a fire pit, was found at the southern end of the pillared section of this long room, against Wall B9:6. The width of the larger, long-room courtyard is 2.70m on the north end but is not yet known on the southern end, as it extends to the southwest into areas still awaiting excavation. At the southern end of Square 10 is the inner casemate wall (B10:6), with its western end likewise awaiting future excavation. The northern wall (B8:3) of the building is 2.00m wide, with a 1.20m entrance (B8:10), which as in Building 2, enters the smaller subdivided long room of the building.

As in the other buildings, there is a beaten-earth surface (B8:13, 20), just above bedrock (B8:15, 24), with red brickly material (B8:14, 23), filling in the bedrock cavities. No surfaces have so-far been discovered dating to the late Iron Age I. However, since this building has only been partly excavated, the lack of evidence is not necessarily definitive. This building, like the two others, dates to early Iron Age I, with some later occupation as evidenced by Iron Age II pottery, including here, part of an early Iron Age II krater, found in the southern section of

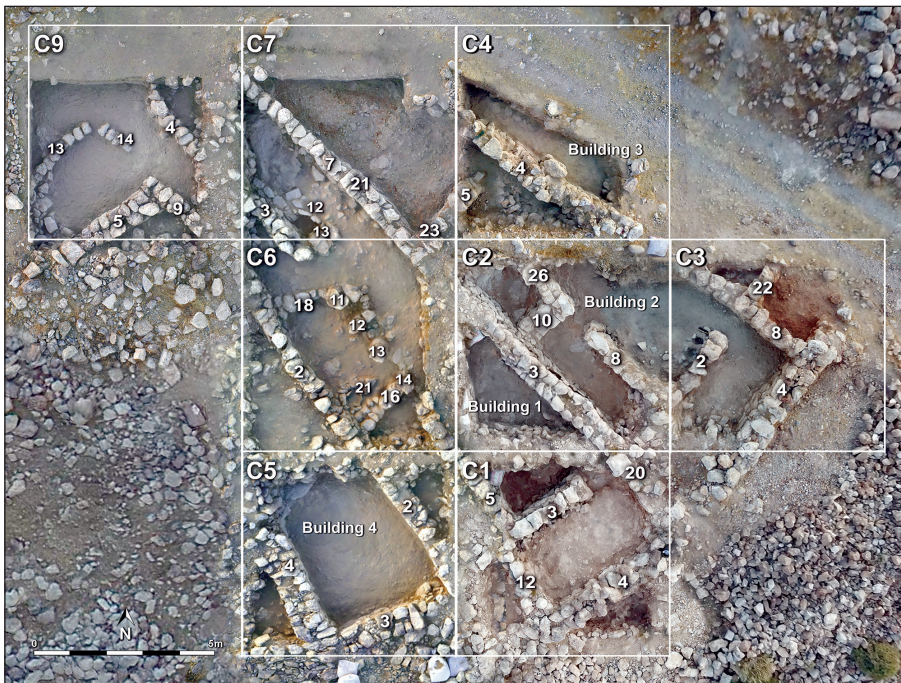
the subdivided long room. The building was ultimately destroyed in the early Iron Age II earthquake, with considerable rock tumble (B8:6, 7, 21; B9:3, 4; and B10:2, 5) from the walls, in evidence.

As noted above, the structures in Field B seem to have been abandoned in early Iron Age II, following the earthquake. Squatter activities may have occurred, as suggested by some occasional late Iron Age II ceramics. Later, during the Byzantine period, there seems to have been a light, perhaps squatter occupation here, as four isolated vessels were found in pits (B3:12, 13) in Square B3. Post-abandonment earth matrix material has accumulated ever since.

Field C

Field C is located on the northeastern corner of the site and is supervised by Trisha Broy. Here, one new square (C9) was opened this season. In addition, Square C7, opened in 2022, was also worked. Bedrock was reached in Square C7, with the early floor, as found elsewhere in the field, exposed and left intact. In Square C9, excavation was completed to the depth of the later floor, leaving earlier material to be removed in a future season.

During the previous seasons, the excavation in Field C has focused on portions of four buildings incorporated into the fortification system (**Fig. 9**). These buildings each have a



9. Field C.

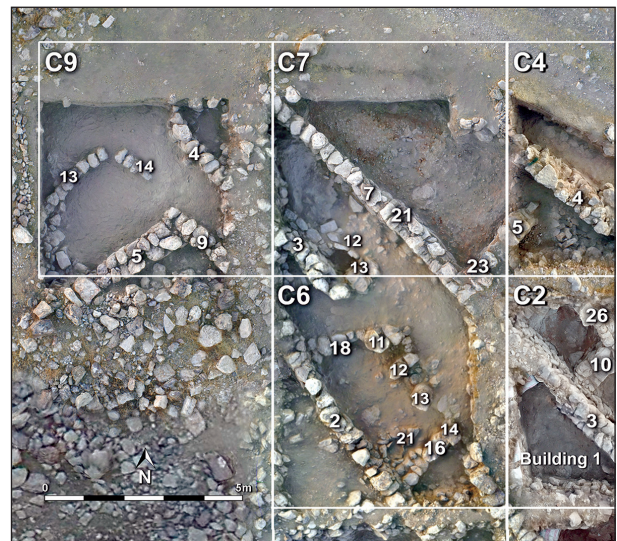
rear room, formed by the casemate fortification walls. The outer wall of the casemate was built directly on bedrock, which had been leveled by the original builders, with a red-bricky material with gravel inclusions. This wall (C1:4=C3:4) is a two-row wall with five surviving courses. It is approximately 90cm wide and is composed of unworked field stones, varying in size from 40- 60cm in width. The inner casemate wall (C1:3=C3:2=22=C5:3) is a single-row wall, also built directly on prepared bedrock. It is approximately 55cm wide and is composed of unworked field stones varying in size from 40- 60cm in width. Single-row walls (C1:12 and C3:8) and double-row wall (C1:20) divide the space between the inner and outer fortification walls into rear broad rooms of buildings that extend into the settlement. These rooms are connected to the rest of the associated buildings by a doorway. All of the walls thus far unearthed in Field C are made of boulder and chink construction with unhewn field stones. These stones are primarily limestone with a small percentage of chert stones.

In the 2023 season, operations in Field C concentrated on exposing the main entrances of Buildings 1 and 2, first opened during the 2018 season, as well as further illuminating the buildings' direct relationship to the adjacent attached structures. These buildings, designated as Building 3 and Building 4, are located on the north-east and south-west sides, respectively, of Buildings 2 and 1.

The shared exterior wall of Buildings 1 and 4 (C5:2=C6:2=C9:9) runs from the south-east to the north-west (**Fig. 10**), with Building 1 on the north-east side of this wall and Building 4 on its south-west side. It is a single-row wall with four surviving courses. No doorways, openings, or connections between Buildings 1 and 4 were found in the excavated length of this wall. Perpendicular to this wall, is a double-row wall (C9:5) that presumably serves as the front wall for Building 4. While this season's work did not fully elucidate this wall's relationship to the rest of Building 4, but it did bring greater clarity to the nature of the primary entrance to Building 1. This wall (C9:5) forms a right angle to Walls C9:9=C6:2=C5:2) on the southwest side of the entryway, with Wall C9:4=C7:3=C6:13=C1:5) forming the north-

east side of the entry. However, this entryway has yet to be cleared and fully excavated, with the removal of the east balk of Square C9. A small enclosure (C9:13, 14), perhaps an animal pen, was unearthed outside (northwest) of wall C9:5. While it has not yet been fully excavated, it currently appears to have openings on both the south-east and north-west sides, perhaps indicating that it was used by the inhabitants of both Building 1 and Building 4.

Further work was done this season in Square C7 to explore the location and nature of the main entrance into Building 2 as well as the occupational surfaces associated with this entrance. Excavations confirmed that the doorway to Building 2 is formed by wall C7:23=C4:5, perpendicular to the wall C4:4=C3:8, shared with Building 3. Two use layers were discovered outside of the entrance to Building 2, one dating to early Iron Age I and the other to early Iron Age II. The first occupation layer consisted of bedrock with leveling fill in the low areas of the bedrock to create an even surface. Outside of Building 2, this floor (C7:17=18) is covered with an ash layer (C7:16=22) and destruction debris (C7:14=15=21), that is sealed under the second occupation floor (C7:13=20). The ash layer on the early Iron Age I floor outside of the entrance to Building 2 contained many food-preparation implements, including a quern, several loaf-shaped grinders, hand grinders, and pounders. Worthy of mention is the partial nature of many of these objects, perhaps suggesting that they



10. Field C squares excavated in 2023.

had been discarded outside of the building prior to its destruction. The ceramics and objects on and in the second occupation surface (C7:13), continue to indicate destruction in the early Iron Age II.

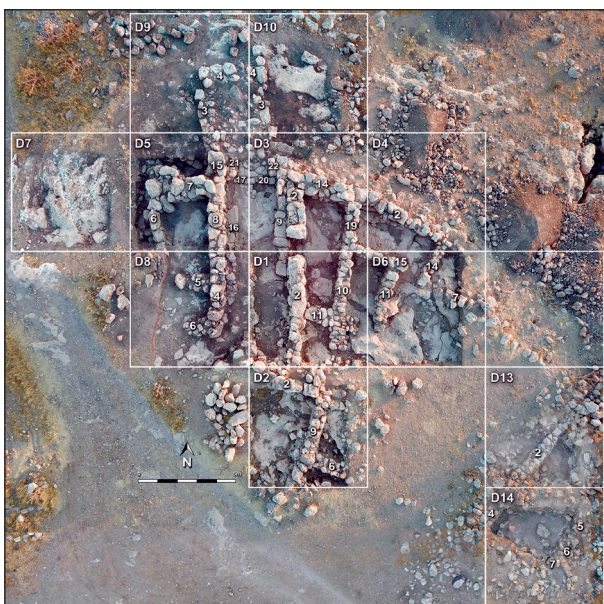
Field D

Field D, supervised by Talmadge Gerald, is located on the northernmost edge of the site (**Fig. 11**). In 2023, two partially excavated squares (D9 and D10) were reopened, with excavation completed there this season, along with two new squares (D13 and D14), which were opened and partially excavated. The goals for the 2023 summer excavation were to reach a better understanding of the gate complex in relationship with the outside approaches to the gate complex, the casemate defenses, and the adjacent buildings.

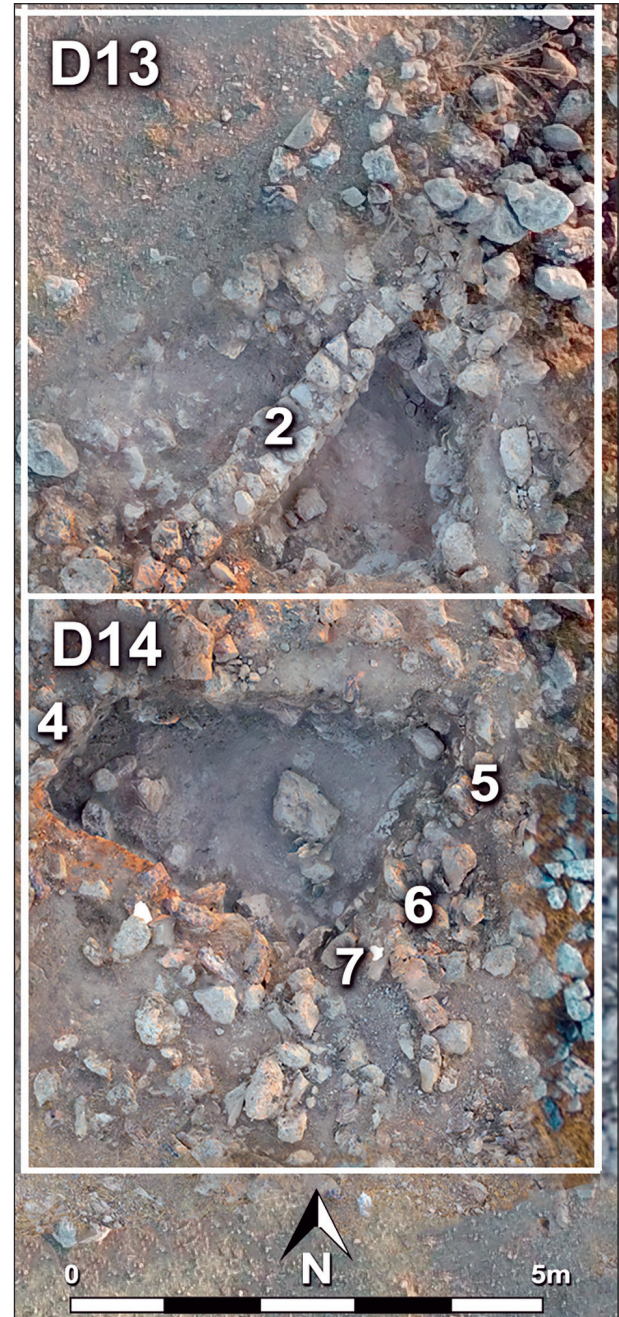
Two squares (D9 and D10), located outside the gate house were reopened to investigate the remnants of the stone architecture which was visible on the surface. In general, the earth matrix in Field D is extremely shallow with bedrock sometimes emerging within 0.10cm below the modern unexcavated surface in some places. Squares D9 and D10, were excavated to bedrock, revealing two one-course walls (D9:3 and D9:4=D10:4), which allowed for an eastern access into the site over a stone threshold (D10:3). These squares yielded only a small amount of pottery and no occupational

surfaces, although an Iron Age I jar (or jug) rim was found just above bedrock (D10:2) in Square 10. There is a steep slope to the north of the gatehouse where water run off likely washed away much of the remaining material from the Iron Age occupation.

Two new Squares (D13 and D14) were opened further east (**Fig. 12**). Square D13 can be traced along the line of the inner casemate wall (see **Figs. 3** and **11**), with Square D14, just south of it. These squares were opened to



11. Field D.



12. Field D squares excavated in 2023.

hopefully reveal additional structures on this part of the site, close to the gate. In Square D13 a northeast-southwest wall (D13:2) ran throughout the square. A surface (D13:5) with parts of two storage jars and 75 Iron Age I body sherds, some of which possibly belonged to these same jars, was excavated immediately to the southeast of the wall. Bedrock was reached in part of the square (D13:10). The wall (D13:2) discovered in Square D13, also ran into the northwest corner (D13:2=D14:4) of Square D14. In the eastern part of that square, another, as yet not clearly identifiable structure (D14:5, 6, and 7), consisting of two pillars, part of a wall, and possibly a doorway, was also located. Bedrock (D14:3) was reached in part of the square.

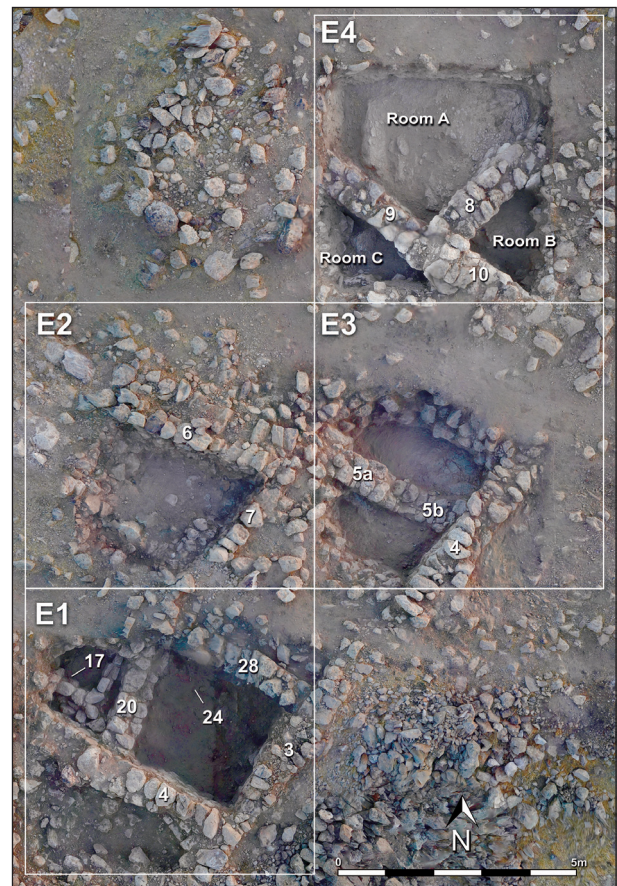
Field E

Field E, supervised by Robert Bates, is located at the highest point of the site, near the main control point (MD1, see **Fig. 2**). This area was originally chosen for excavation because the highest elevations of a site are typically reserved for cult places and other important buildings, like administrative centers and elite living quarters. In 2023 one new square (E2) was opened, with work continuing in Square E4 from the previous season.

Square E2 is located north of Square E1, west of Square E3, and southwest of Square E4 (**Fig. 13**). Two walls were visible on the surface, with one (E2:6) running east-west as a continuation of Wall E3:5 in Square E3, and another (E2:7) oriented north-south, abutting Wall E2:6, that may have eventually connected to the north-south wall (E1:20) in Square E1. A modern inhumation burial, found in the topsoil on the south side of Wall E2:6 and east of Wall E2:7, was removed for reburial. Much of the square south of Wall E2:6 consisted of medium to large boulders that had collapsed from Walls E2:6 and 7. This debris was removed to a depth of 0.5m. Preliminary ceramic readings suggest that there may have been at least two occupational phases. The initial early Iron Age I phase, which ended in a building collapse, was followed by a late Iron Age I phase, built after Wall E2:6 was repaired.

Square E4, originally opened in 2022, is located north of Square E3 and northeast of Square E2. However, the common wall (E1:3=E3:4)

that passes through Squares E1 and E3 runs to the east and can be seen on the surface just outside of this square. Square E4 is subdivided into three areas by three walls (E4:8-10). The main wall, *Locus* E4:8, is 3.40m long and oriented 45 degrees northeast. The two other walls (E4:9-10) abut Wall 8 and are oriented 49 degrees northwest and 125 degrees southeast, respectively. All three walls consist of two rows of 0.30×0.40m unhewn, partially faced hard limestone and chert boulders. The north face of Walls 8 and 9 form Room A, the largest of the three rooms, where five hard-packed surfaces (*Loci* E4:11 and E4:13-16) with flat-lying pottery, dating to the early Iron Age I were found in 2022. The east and north sides of Walls 8 and 10), respectively, form Room B, where medium-large boulders and debris from these walls had collapsed. Room C is on the south side of Walls 8-10, where a single hardpacked surface (E4:20) was found, sealed against these walls. It appears that Wall 10, which divides Rooms B and C, abuts the unexcavated portion of the main wall (E3:4) in Square E3.



13. Field E.

The 2023 excavation in Square E4 continued exploring Rooms A-C, excavating each to bedrock. One additional hard-packed surface was found in Room A this season, supported by many small cobblestones, laid over hard-packed bricky material and filled with earth. Room B contained a single hard-packed floor with a foundation of small cobblestones. However, in Room C, only a few cobblestones were used as a foundation to support the floor compared to the other rooms. In Room B, a largely intact early Iron Age I pyxis vessel (Object S0164, *cf.* **Fig. 14**) was found in the square's southeast corner next to Wall E4:10, near the east balk. A quern and a loaf-shaped grinder were also found near this vessel, by Wall E4:8. Botanical samples were collected from all three rooms, with a preliminary result of cereal plants and some grape seeds found on or in the beaten-earth floors of each room. The pottery results suggest these three rooms (A-C) were built during early Iron Age I and were occupied until wall collapse rendered them uninhabitable.

Preliminary Conclusions

The results from the fifth season of excavation continue to indicate that the first settlement

at Khirbat Aṣ Safrā was established during early Iron Age I, possibly as early as the late 13th century BC. Part of this settlement was at least partially destroyed by fire later in Iron Age I, reflected by an ash layer of varied thickness in the northern and eastern parts of the site, as revealed in Fields C and D. Following this destruction, the site was reoccupied until sometime early in Iron Age II, when it was destroyed a second time, most likely by an earthquake. Some post-destruction squatter occupation following the earthquake is possible based on a few late Iron Age II sherds found on occasion. There was then a hiatus at the site until the Byzantine period, at which time a significant structure was built in Field A. About halfway through the Byzantine period occupation, this building was destroyed by a major conflagration, after which it was at least partially rebuilt. Some pitting activities in Field B, and surface sherds found throughout each of the excavation fields also indicate occupation during the Byzantine period. This final occupation of the site ended with another earthquake, probably in the late Byzantine or the early Islamic period.

The preliminary phasing of Khirbat Aṣ Safrā appears to be as follows:

Phase	Period	Field
Occupational Phase 1	Byzantine Period	A structure, B pits, B, C, D, E sherds
Occupational Phase 2	late Iron I - early Iron II	B, C, E reused buildings, A, D sherds
Occupational Phase 3	Iron Age I	A, B, C, D, E, fortifications, and buildings



14. Early Iron Age I Pyxis (Object S0164). Photo by Robert D. Bates.

As in the previous seasons, the excavations in 2023 yielded mostly small finds connected with agricultural and domestic functions. Of the 153 objects discovered this season, 99 were related to agricultural and domestic activities. In addition, 17 textile objects were also uncovered, with five recreational (gaming piece) artifacts, and six items of jewelry; again, mostly beads. Three architectural fragments were found for the first time this season.

Based on the ceramics and objects found so far, it appears as though the site of Khirbat Aṣ Safrā generally represents a domestic settlement, with an emphasis on agriculture and some cottage industries. However, at least seven Egyptian or Egyptian-inspired artifacts, including a seal, a scepter, and seated Egyptian statue, suggest that Khirbat Aṣ Safrā played a more significant role in the region.

Logistics

Robert Bates has continued to make innovations to the digital field database. The system uses FileMaker Pro Software, and runs on the FileMaker Go App, on iPads. As usual, progress shots and end-of-the-season photography were taken with a digital camera mounted on a Wonder Pole™ (a telescoping device with a camera mount on top) using a blue tooth connected mobile phone to activate the shutter. The numerous images are combined to create 3D images using Metashape Photoscan Pro software. In addition, this season the Safra team experimented with 3D LiDAR digital photography in every field.

Botanical Analysis

Thanks to a faculty research grant from Andrews University, the Khirbat Aṣ Safrā team once again collected botanical samples from the excavation fields for archaeobotanists Annette Hansen and Frits Heinrich, who spent two weeks on site dry sieving these materials and preparing the samples to be sent to their laboratory in the Netherlands for further analysis, the latter with the help of the staff at the *American Center of Research*. According to their preliminary on-site analysis of this season's botanical assemblage, it included the presence of cereals (hulled wheat, and barley), pulses (lentils, including peas), and fruits (grape and olive).

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