

PRELIMINARY REPORT ON 2019 SEASON OF EXCAVATIONS AT KHIRBAT AṢ SAFRĀ

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Introduction

Andrews University conducted its second season of archaeological excavations at KHirbat Aṣ Safrā between June 2 and July 12, 2019. The excavations were directed by Paul Gregor and Paul Ray of the Institute of Archaeology at Andrews University, with Ray and archaeology doctoral candidate Jacob Moody as Field Supervisors. About twenty faculty, students and volunteers were joined by eight Jordanian workers during the excavations this season¹.

The site of Tall Jalūl, near Mādabā, has been undergoing an on-going series of excavations

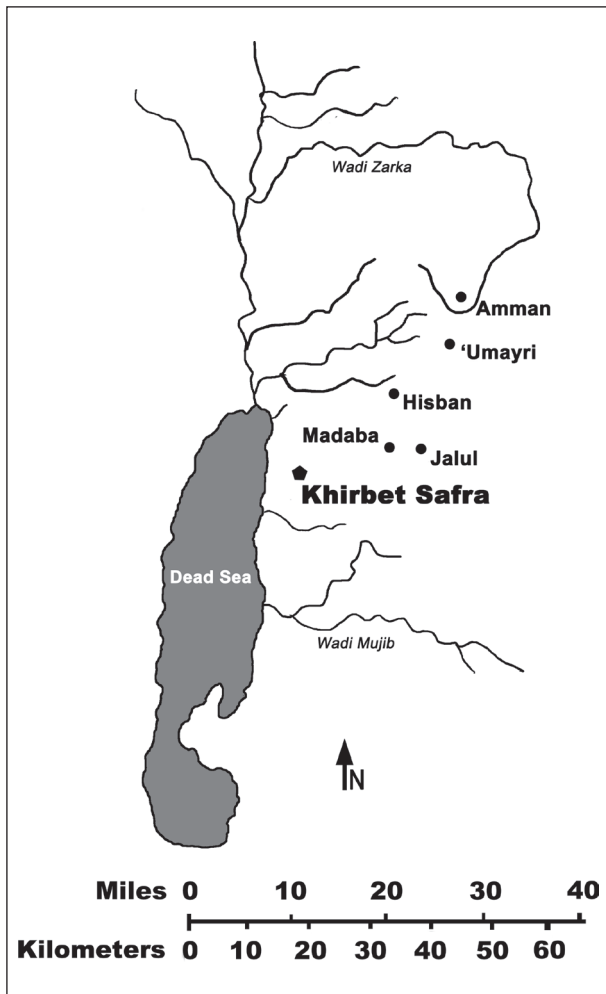
¹ We wish to thank HE Yazid Hashem Mohammed Elayan, acting Director General, and his staff at the Department of Antiquities of Jordan for their support of the project during this season. Also we would like to express our appreciation to Basem Al-Mahamid, Director of Madaba Antiquities Directorate, of the Department of Antiquities of Jordan. In addition, we would also like to thank Barbara Porter and Jack Green of the America Center of Oriental research (ACOR) for their usual assistance. Finally, we appreciate the help of Nisrin Khaled Fugh'a, and Amal Rawahna of the Department of Antiquities of Jordan, who served as our department representatives in 2019 season.

Staff for the 2019 season included director Paul Z. Gregor and co-director Paul Ray. Paul Ray also served as object registrar, with the help of Jeffrey Hudon, Elizabeth Emswiler and Hala Ajilat. Jeffrey Hudon and Hala Ajilat served as pottery registrars, and Jacob Moody and Paul Ray oversaw GPS readings on the site. Robert Bates, Jacob Moody and Talmadge Gerald served as technical advisors, dealing with the electronic database and iPad issues. The Square supervisors for Field B were Elizabeth Emswiler, Eva Glazer, and Christie Goulart Chadwick and for Field D were Talmadge Gerald, Aleksandra Jovanovic, and L. Scott Baker. Volunteers included Wol Bol Wol, Shingu Ju, Andreas Luntungan, David Glazer, Einra Baker, Guilherme Caldeira, Ademar Camara, Daniel Palacios-Worley, Parker Muhleneck, and Shinasue Takuma.

by Andrews University since 1992, as part of the Madaba Plains Project, with Phase I, of the excavations at the site, ending in 2012. During the publications hiatus, prior to a renewal of future large-scale excavations (Phase II), and in accord with the regional scope of the project, the team has more recently begun work at of the site of KHirbat Aṣ Safrā, beginning with a surface survey in the summer of 2017, and physical excavations at the site, first in 2018, with a second season of excavations in 2019. For background information on Tall Jalūl, the Jalūl Islamic Village, and the history of the excavations at the site (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 Safrā 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 excavation at KHirbat Aṣ Safrā, in 2018 (Gregor *et al.* 2021).

Results of the 2019 Season at KHirbat Aṣ Safrā

KHirbat Aṣ Safrā is an approximately 2.6 acre, triangular-shaped site, located southwest of Mādabā, overlooking the Dead Sea (Fig. 1), with a casemate wall system surrounding the perimeter. Excavations this season took place in two (Fields B and D) of the four fields opened in 2018. Each excavation square, as in the previous season, was opened, using GPS on the



1. Regional Map.

basis of a grid of 6.0×6.0m squares laid over a topographic map created by the Department of Antiquities surveyors during the survey season, in 2017 (Fig. 2).

The Fortifications

The casemate wall system has now been exposed in all four excavation fields (A, B, C, and D) on the site (Fig 3). The walls are freestanding, built directly upon bedrock, which is uneven, with various-shaped crevices. These crevices were filled with a densely-packed, sterile, red-bricky-like material, lacking material culture. On top of bedrock, a *ca.* 1.30-1.40m thick, one-two row outer wall, a *ca.* 0.70-0.80m thick, one-row inner wall, and *ca.* 0.40-0.60cm thick, single-row cross walls were constructed, with large field stones and chink stones, creating broad rooms *ca.* 5.0-6.5m long×2.0-2.25m wide. In three fields (B, C, and D), entryways have been found in the inner wall, connecting

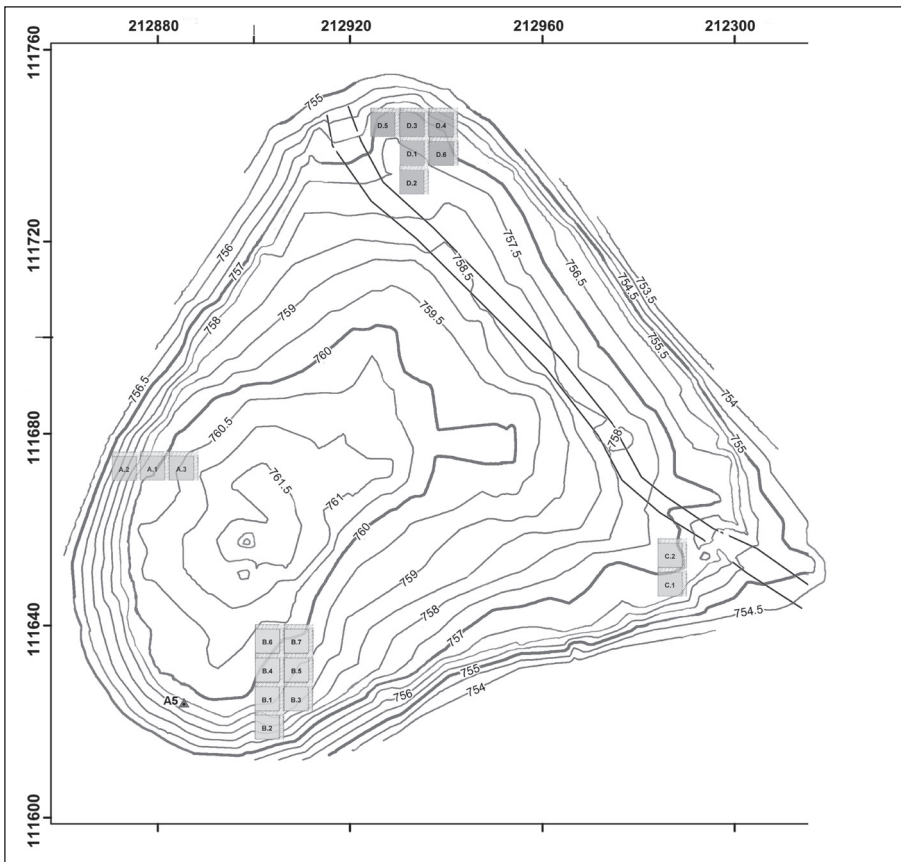
rooms on either side. In each field, the initial construction of the casemate wall system has been dated to the early Iron Age I.

Field B

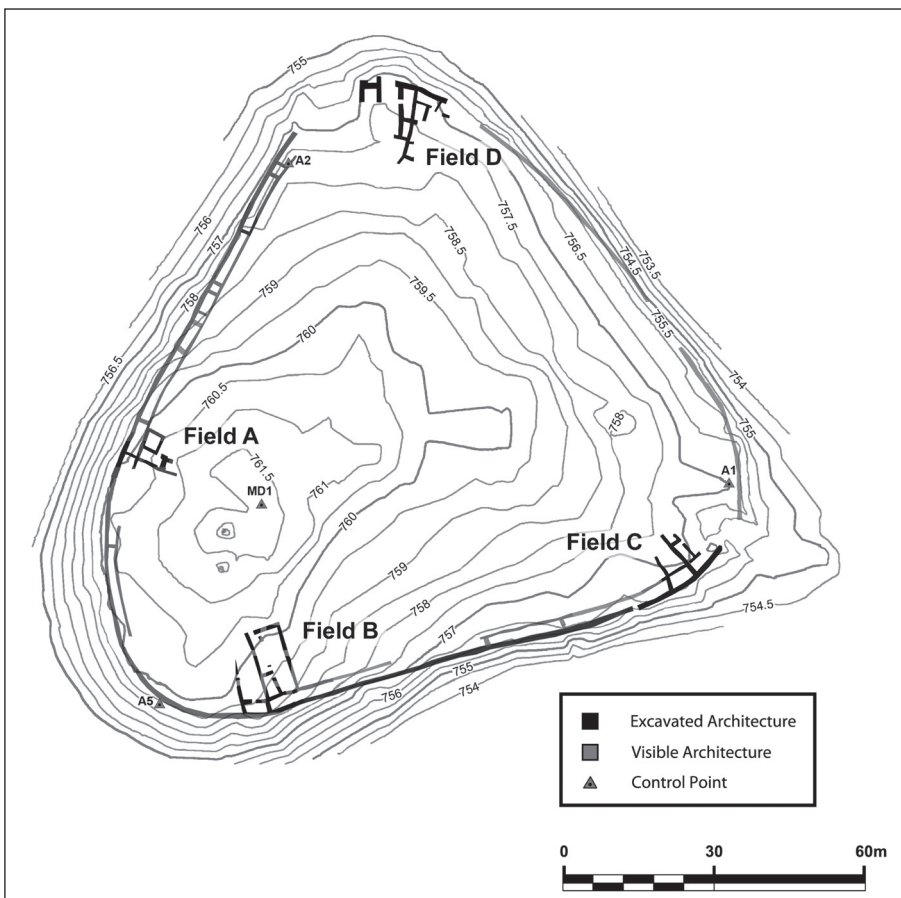
Field B, on the southwestern edge of the site (Figs. 4 and 5), was supervised by Paul Ray. The main goal for this season was the lateral exposure of the field to the north of the casemate rooms, excavated in 2018, in order to see what might be learned about domestic and cultural activities on this part of the site. Here, four new squares (B4-7) were opened this season, with another (Square B3), partly excavated in 2018, being completed at this time. Bedrock was reached in parts of four of the five squares, with Square B7 being worked for only a few days. The result was the unearthing of parts of two buildings, consisting of long room-structures, sharing one wall, and connected with the broad-room casemates, previously excavated.

Building 1, the westernmost structure, was traced to the northwest from the broad room casemate structure in Square B1, throughout Square B4, and much of Square 6. Its eastern wall (B3.6, 14=B4.3=B.6.5), which is shared with Building 2, is completely extant, but most of the western wall is located in an area that, is as yet, unexcavated. This wall was traced for a short distance (B1.11, 13=B4.17, 2), before it disappeared in the west balk of Square B4, just beyond a postern or side entrance (B4:18), to the west. The entrance (B6.20) to the building is on the north side of the building, with what appears to be the bedrock footing (B6.17) to a ghost wall, on its western end, again disappearing in the balk.

The outline of Building 2 is clearer than its western neighbor, and was traced throughout parts of five squares (B3-7) excavated this season. With the exception of a few short sections, still within unexcavated balks, its walls are completely exposed. The western wall (B3.6, 14=B4.3=B.6.5), which is shared with Building 1, and its parallel to the east (B5.9=B7.2), were traced slightly over 12 meters to the northwest from the broad room casemate structure in Square B3, to the south. The visible, but so-far unexcavated, entrance (B6.18) to the building is in the northwest corner of the north wall. The building is subdivided on its southwestern side



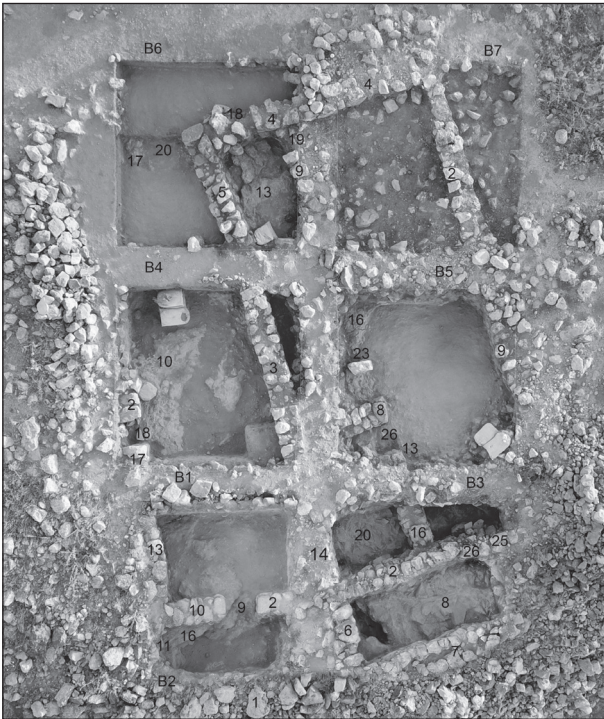
2. Topographic Map of Khirbat As Safrā with Excavation Fields.



3. The Casemate Fortification System at Khirbat As Safrā, with excavated architecture.



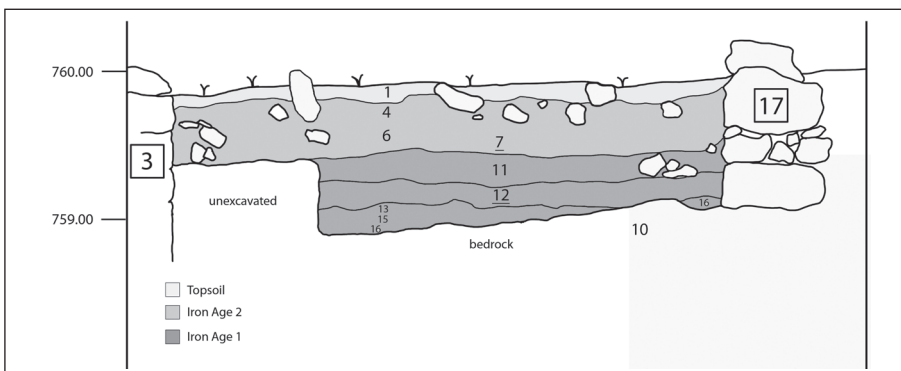
4. Field B.



5. Field B, with locus designations.

by a small room (B3.2, 14, 16 =B5.13, 8), with its entrance (B5.26) on the east from the main room. Further to the north, located on top of a shelf of bedrock (B5.16), was a beaten-earth floor (B5.14=15), partially paved with cobble stones. The building is further subdivided by a pillar (B5.23), and a short section of wall (B6.9), with another entrance (B6.19) into the main room, at the north wall of the building.

Use layers, in the form of beaten-earth surfaces, were discovered in both buildings. The first occupational layer (Building 1, B4.16, 19, 21 and B6:12; Building 2, B3.23, B5.25) was located just above the red-bricky fill material placed in the undulations of bedrock. Throughout Iron Age I, two or three additional beaten-earth surfaces (Building 1, B1:5=B4.12 (lower) and B6.10 (upper); Building 2, B3.21 (lower); B3.18=B5.21 (middle); and B5.19=20 [upper]) were laid. The middle of these two occupational layers, in Building 2, was apparently destroyed by a conflagration (ash layer B5.22), as evidenced on the eastern side of Building 2, in Square B5, but which is unattested in Building I. It would appear to have been the same fire that destroyed buildings in other areas (Fields A, C-D) of the settlement. Within this destruction layer, parts of a collar-rim pithos were found. On the western side of Square B5, above the cobble stone pavement (B5.12) in the small room in the southwest corner, was another beaten earth surface (B3.17=B5.11). Later, perhaps during early Iron Age II, still another beaten-earth surface (B1.6=B4.7, *cf.* Fig. 6) was laid above a fill layer in Building 1 (B1.7=B4.11). It appears that at least two of these surfaces, in Building I, were connected with stone thresholds, placed in the doorway of the postern entrance, presumably to keep everything level on both



6. Field B4 South Balk.

sides of the wall. A destruction, probably by an earthquake, sometime during the early Iron Age II, as noted last season, left considerable ruins, with stones penetrating two of the earlier floor levels.

Preliminarily, it would seem that Building 1 represents a two-room house (one long room and one broad room), while Building 2 is a three-room house (one broad room and two long rooms). As noted last season, the structures in Field B seem to have been abandoned following an earthquake, although squatter activities may have occurred, as suggested by the presence of some late Iron Age II ceramics. Later, during the Byzantine period, there also seems to have been a light, perhaps squatter occupation here, as four isolated vessels were found in pits, in Square B3, in 2018. Post-abandonment earth-matrix material has accumulated ever since.

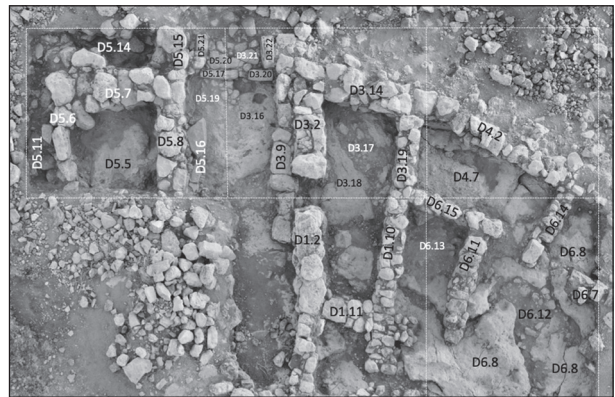
Field D

Field D (Figs. 7 and 8), supervised by Jacob Moody, is located on the northernmost edge of the site. Four new squares (D3-6) were opened and completely excavated in 2019. Their locations were chosen with the intent to help better understand the architecture in Field D and to provide a chance to excavate between the casemate walls, the tops of which, were already visible on surface. The portions of Squares D3 and D4 that were located outside the outer wall were left unexcavated. In general, the earth matrix in Field D is very shallow, with bedrock, in some cases, only 10cm below the surface, so these squares were quickly excavated down to bedrock, after which the balks were removed to provide a clearer picture of the obstructed architectural details, yielding the discovery of at least one casemate room and part of the gate complex to the site.

One complete casemate room was uncovered this season, covering portions of Squares 3, 4, and 6, with the outer wall represented by D3.14=D4.2=D5.7), the inner wall (D6.7, 15), and cross walls (D3.19 and D6.14). The southwest corner of another casemate room (D6.7, 14) may have also been uncovered in Square D6. Another small room, outlined by walls D1:10 and D6.11 and 15, was also uncovered in the western portion of Square D6. Some occupational surfaces were found



7. Field D.



8. Field D, with locus designations.

in Squares D3, D5, and D6. These surfaces (D3.11, D5.4, and D6.13), were just above the bedrock, and in some places level with small exposed portions of the bedrock. They were made of flat, hard-packed earth, with some had flat-lying pottery on top of them. All this pottery dates to Iron Age I.

Part of the city gate complex, with its accompanying installations, and the various walls which make up its different rooms, was found this season. The gate is located within parts of Squares D3 and D5, with the westernmost part of Square D3 representing half of the gate, while the easternmost part of Square D5 made up the other half. There is a clear 2.5m break in the outer city wall (D3.14 and D5.7), and within this gap is its threshold (D3.20=D5.17). Outside of this threshold, to the north, are paving stones (D3.21 and D5.20) that have been worn smooth, from use. Bordering these pavement stones, both to the east and west, are two long, rectangular stones (D3.22 and D5.21) that run perpendicular to the threshold. Their exact purpose is unclear,

though they seem to have narrowed the gate entrance, and were perhaps used as supports for something above them. Further research on possible parallels is needed. Entering the city, just south of the threshold, a surface (D5.19) was found, with cobbles and earth used to level the ground with the sloping bedrock (D3.16). The roadway inside the gate is lined by two large walls (D1.2, D3.2 and D5.8=15), with benches (D3.9 and D5.16) installed up against them. Two long rooms, paralleling the gate entrance street, on the east and west, help to make up the gate complex. The eastern room, exhibiting a doorway into the room, from the street, has been fully excavated. The portion of the western long room, excavated so far, in Square D5, seems to match its eastern counterpart. A similar doorway into this room is suspected, but excavation to the south is needed to confirm this supposition.

Following the destruction of the casemate wall and gate, there seems to have been a period of abandonment, represented by a layer consisting of mostly post-depositional Iron Age II ceramics. In addition, a few Byzantine-period sherds were found, just below the current topsoil.

Preliminary Conclusions

Based on results from the first two seasons of excavation, the first settlement at KHirbat Aṣ Safrā was established during early Iron Age I, possibly as early as the 13th century BC. Later in Iron Age I the settlement was destroyed by fire, represented by thick ash layers in every field. After that time, KHirbat Aṣ Safrā remained occupied until sometime, early in Iron Age II, when the entire site was destroyed for a second time, most likely by an earthquake. Some late Iron Age II sherds suggest a possible

squatter occupation, following the earthquake, after which there was a hiatus in settlement until the Byzantine period, at which time a significant structure was built in Field A. Some pitting activities in Field B, and surface sherds throughout each of the excavation fields, also indicate occupation at this time.

Typical Iron Age I ceramics from Phase 3 include collar-rim pithoi (**Fig. 9**), biconical jars, cooking pots (**Fig. 10**) and Manasseh bowls.

As in the first season, the excavations in 2019 yielded mostly small finds connected with agricultural and domestic functions. Of the 205 objects discovered this season, most (112) were related to agricultural activities. In addition, 28 textile objects were also uncovered, with seventeen items of jewelry (mostly beads), ten recreational (gaming pieces and buzz toys) artifacts, with only one (a sling stone) related to warfare. In addition, two possible mercantile weights, and half of a cylinder seal were found. Based on the ceramics and objects, found so far, from both seasons of excavation, it appears likely that the site of KHirbat Aṣ Safrā represents a typical domestic settlement, with an emphasis on agriculture and herding activities.

Logistics

The excavations at KHirbat Aṣ Safrā continues to use an electronic format for data collection. Work on the *locus* sheets from the Madaba Plains Project Field Manual by Robert Bates has continued to evolve, each season becoming more user-friendly and intuitive, where possible. The system uses File Maker Pro software, and runs on the File Maker Go App, on iPads, operated by the supervisors in each field and square. The data are backed up wirelessly via air drop from the iPads to a



9. Collar-rim Pithos from Field B.



10. Cooking Pot from Field D.

The preliminary phasing of the site appears to be as follows:

Phase	Period	Field
Occupational Phase 1	Byzantine Period	A structure, B pits, C sherds, D sherds
Occupational Phase 2	Early Iron Age II	A, B, C, reused buildings, D sherds
Occupational Phase 3	Iron Age I	A, B, C, D fortification and buildings

lap top computer at the end of each day. Daily progress shots, photos of pottery readings and artifacts are taken with the iPad camera and embedded into the *locus* sheets as well as being stored on the device. GPS is used for geospatial information. Top plans are produced on graph paper and are then scanned to the iPad. The early-morning field shots and end-of-the-season photography is taken by a digital camera from a wonder pole (a telescoping device with a camera mount on top), integrated with an iPad as an optical piece, with the numerous images combined together to create final 3D images of each square, using Photo Scan Pro software by Jacob Moody and Talmage Gerald.

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