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Cover Illustrations:

Front: Building B2 at Yesodot (see p. 17, Fig. 2.7)

Back: The Yesodot Plaque Figurine (see p. 61, Fig. 5.1)

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SALVAGE EXCAVATION OF TWO WINERIES AT KHIRBET BUTZ – 2010

Conn Herriott

This salvage excavation was carried out on July 7–11, 2010 on a hill overlooking the Elah Valley, near Khirbet Butz (New Israel Grid: 201310–619160; 382.0m ASL). The dig focused on two areas—Areas A and B—each of which revealed the remains of an ancient wine press cut into the exposed nari bedrock. The two excavation areas and their associated artifacts will be described in this report, followed by an interpretive discussion of the findings' possible significance.¹

Area A

This area encompassed a wine press with a total area of 12.75m² (Figs. 3, 5). The press consisted of a rectangular treading floor (L1, 8.74m²) and a circular vat (L2, 0.32m³, Fig. 4), linked by a narrow channel. The installation was heavily damaged, especially the treading floor. The cause of the damage was unclear.

Excavation of the press yielded 100 potsherds, 85% of which we found in the vat. These sherds represent Byzantine/Umayyad bowls and jars (7th–8th centuries CE; Fig. 9:1, 2, 4, 6, 7; see also the Appendix). Also found on the treading floor was a chipped-stone blade fragment (Fig. 10:1; see also the Appendix).

Area B

The wine press in this area—ca. 50.0m west of Area A—covered 10.2m² (Figs. 6, 8). It was comprised of a rectangular treading floor (L5, 4.0m²) and a rectangular vat (L4, 0.62m³) linked to the treading floor by a channel, as well as another rectangular vat (L3, 0.27m³) which was neither connected to

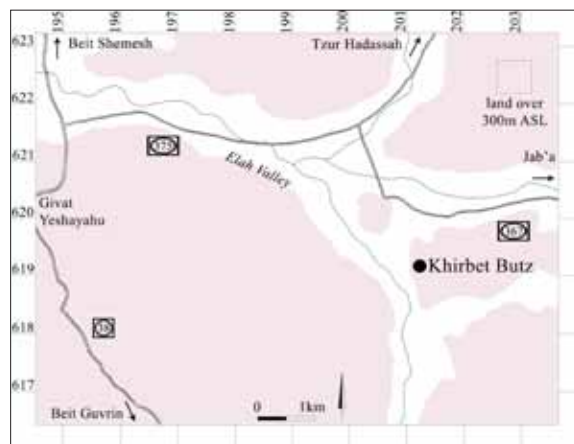


Fig. 1. Location map of the Khirbet Butz project (New Israel Grid: 201310–619160).

the first by a channel nor a bore hole, and a cup mark (L7, Fig. 7), located 1.12m west of the L4 vat.

During the excavation of this press 21 potsherds were found. These were distributed evenly between the treading floor and vats. The sherds represent bowls, jars and possibly cooking vessels which generally date to the Byzantine/Umayyad centuries (Fig. 9: 3, 5, 8; see also the Appendix). A chipped-stone blade fragment was also found in this wine press (Fig. 10:2; see also the Appendix).

¹ I thank Yehuda Govrin for giving me the opportunity to direct the excavation. He is the *de facto* manager of this ongoing salvage project. Thanks to Dov Sreter of Eden Hills Ltd for contracting Y.G. Archaeology Ltd, and for his enthusiasm and assistance at every stage of the excavation. Mr. Sreter's deep interest in archaeology and desire to include this heritage resource in the completed Eden Hills Ltd project is a breath of fresh air. Also, many thanks for their analyses, advice and help to Dr. David Ilan and Levana Tsfania of the Nelson Glueck School of Biblical Archaeology at the Hebrew Union College, Jerusalem, to Dr Rafael Frankel of the University of Haifa, to Dr. Jodi Magness of the University of North Carolina at Chapel Hill, and to Dr. Barbara Johnson of the Albright Institute of Archaeological Research. Thanks also to the staff of the Israel Exploration Society for their bibliographical assistance, and to Alona Ruban for such fine and prompt illustration of the ceramic artifacts.

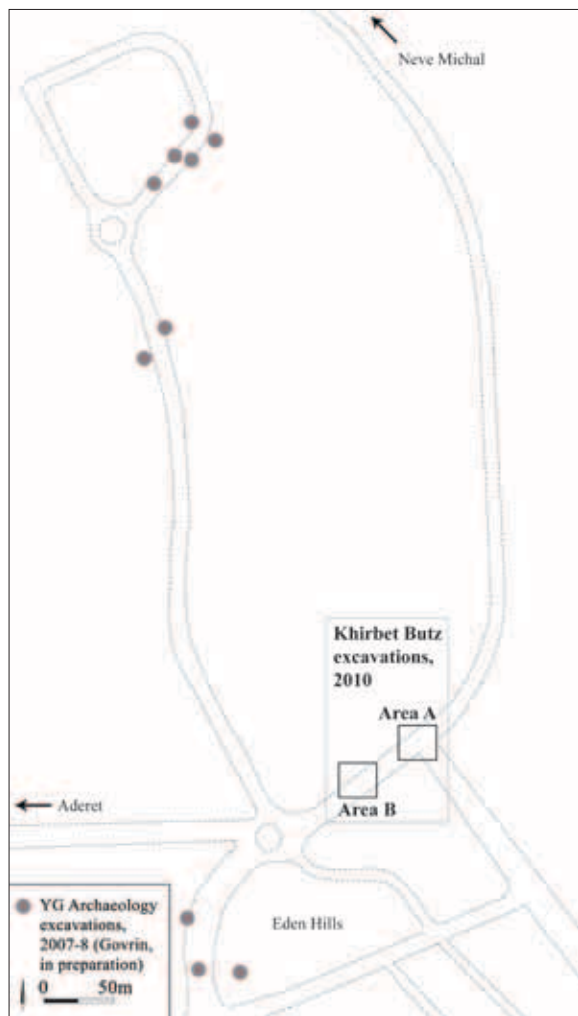


Fig. 2. The current excavation site within Khirbet Butz, with Areas A and B marked.



Fig. 3. Area A (looking southeast).



Fig. 4. Vat (L2) (looking north).

Discussion and Interpretation

These wine presses follow the simplest design for such installations: Frankel's type T1 (Frankel 1999: 51-56). The two installations differ in that the Area A treading floor is twice as large² and the Area B press was more elaborate: it incorporated a second vat (L3) and an associated cup mark (L7). Whereas the function of the second vat is a mystery (see below), the cup mark may have served as a mortar for the grinding of a substance related or unrelated to the adjacent wine production process. It seems too shallow (0.08m) and gently-sloping a depression, however, to have served as a socket supporting the apparatus sometimes erected to aid those treading grapes (Frankel 1999: 42, 55 and Fig. 1).

The differences between the two presses may suggest that they were not contemporaneous. It is difficult to say. There are overlaps in the usage periods of their respective design types, and the broader T1 category was built from the Chalcolithic period (i.e., from ca. 4300 BCE) right through to Umayyad times. On the whole the artifacts from both presses point to a Byzantine/Umayyad date (Johnson, Magness, pers. comm.), discounting what were probably stray flint blade fragments from earlier periods. This impression accords

² According to Frankel's (1999: 53) statistical analysis of T1 wineries, both A and B at Khirbet Butz are very common designs. Area A has a large treading floor, and Area B is of average size.

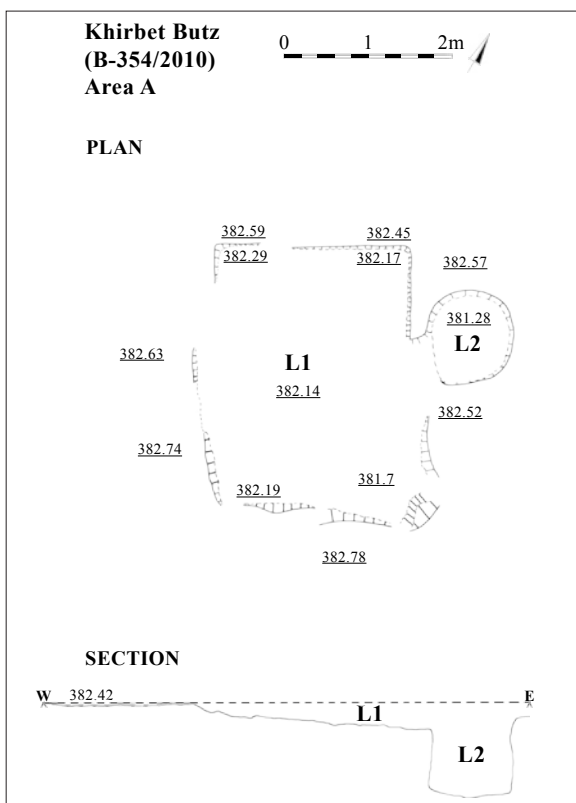


Fig. 5. Plan and section drawings of Area A.



Fig. 6. Area B (looking north).



Fig. 7. Cup mark (L7).

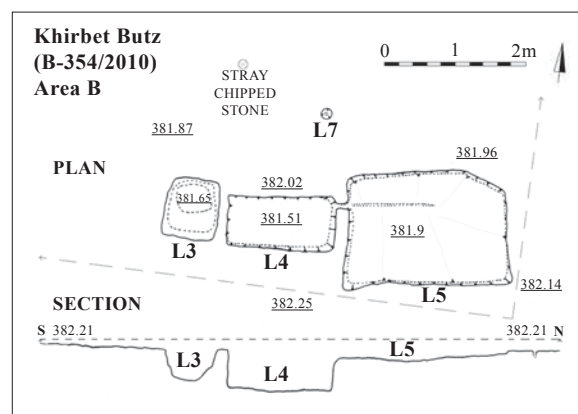


Fig. 8. Plan and section drawings of Area B.

with quantitative analyses of ancient settlement and winery data in the southern Levant, which indicate that both population density and wine production reached their peaks in the Late Roman and Byzantine periods (Frankel 1999: 51).

Whether both installations were in operation at the same time or not, we can envision them as part of something in the way of a family-run winery, a small-scale operation of the local population in the Byzantine/Umayyad period. Other features and possible settlements have been found in the immediate site vicinity during previous seasons of work here by Y.G. Archaeology Ltd (Govrin, in preparation). Ethnographic recordings of such installations in use near Masada and Hebron in more recent times (see Frankel 1999: 42 and references) reveal that one man could tread 100kg of grapes in 45 minutes on such a treading floor as

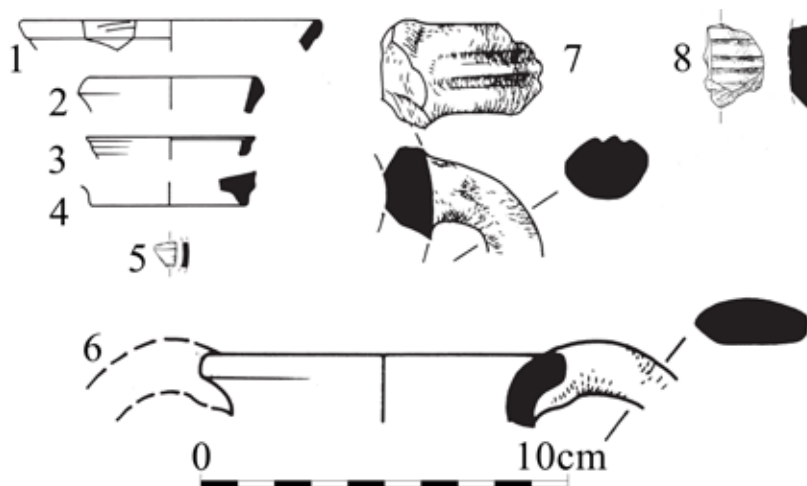


Fig. 9. Selected ceramic artifacts, by type.

No.	Vessel	Field no.	Locus
1.	Bowl	102/1	1
2.	Bowl	102/2	1
3.	Bowl	110/1	Stray
4.	Bowl/jug	104/2	1
5.	Bowl; purple glaze	106/2	3
6.	Jar/krater?	112/4	2
7.	Storage jar/krater?	113/1	Stray
8.	Jar	109/2	Stray

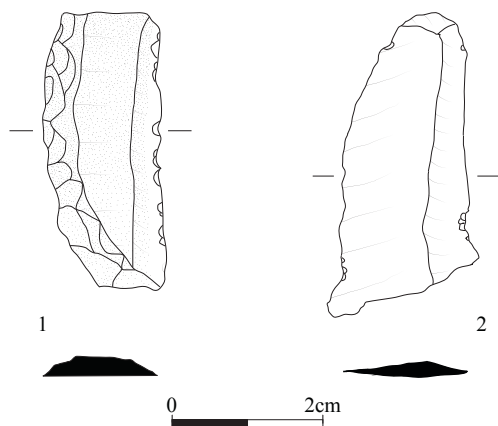


Fig. 10. Flint artifacts.

Fig. 10.

No.	Vessel	Field no.	Locus
1.	Flint blade	104/1	1
2.	Flint blade	106/1	Stray

found at Khirbet Butz. The channel connecting the floor to the vat might initially be blocked by small branches of poterum (great burnet) or another plant or object which would act as a sieve keeping grape skins and stalks out of the vat, but this sieve would fast become blocked up. During the treading process all skins and solids would be gathered to the centre of the floor by feet, broom or wooden shovel. When enough must was pooled in the floor, the channel block would be removed and all other skin and wastage removed by hand. These would later be pressed to capture any remaining liquid, before starting the fermentation stage of the wine production process.

Frankel (pers. comm.) has suggested that L3—the vat in Area B which was not connected to any treading floor—may have served for producing red wine, which involves leaving the skin in the must during fermentation.

Two final points of interest will be mentioned. Firstly, given that Khirbet Butz wineries may have been in use during the Umayyad period, we note that it is not impossible that Muslims were the operators. The Druze and Muslim workers who were the subjects of the above-mentioned ethnographic recordings were not treading grapes to make wine, but rather a sweetmeat called ‘Dibes’.

Secondly, it is possible that olives were also crushed in the treading floors, this action being shared by both wine and olive oil production. For this reason, there is considerable debate about whether or not the same installations would be used for both grapes and olives (see Frankel 1999: 57) and such is certainly possible for this simple treading floor type.

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Appendix: Artifact Photographs (by locus)



L1

No.	Field no.	Type	Description
1.	102/1	Bowl	Light orange ware; collared rim.
2.	102/2	Bowl	Red/orange coarse ware; thickened, bevelled and pointed rim.
3.	104/2	Bowl/Jug	Red/orange coarse ware; ring base.
4.	104/1	Flint blade	Marbled grey stone; backed.



L2

No.	Field no.	Type	Description
1.	103/1	Bowl	Red coarse ware; thickened rim.
2.	112/1	Bowl/Jug	Light orange ware; ring base.
3.	112/2	Bowl/Jug	Light orange ware; ring base.
4.	112/3	Jar/Jug	Light orange ware; handle.
5.	112/4	Jar/Krater?	Light orange ware; rim handle; simple rim (?).



L3

L3

No.	Field no.	Type	Description
1.	106/1	Bowl/Jar	Orange ware; ridged.
2.	106/2	Bowl	Red ware; purple slip; glazed.

*L4**L4*

No.	Field no.	Type	Description
1.	107/1	Bowl	Orange ware; thickened, bevelled, pointed.

*L5**L5*

No.	Field no.	Type	Description
1.	108/1	Bowl?	Red coarse ware; body sherd.
2.	108/2	Oil lamp?	Orange/red ware; simple rim.
3.	108/3	Bowl	Grey/orange ware; external striations.

*Area A Stray.**Area A Stray.*

No.	Field no.	Type	Description
1.	113/1	Storage Jar/ Krater?	Light orange coarse ware; ridged handle.



Area B Stray.

No.	Field no.	Type	Description
1.	109/1	Bowl/Jar?	Grey/orange ware; body sherd.
2.	109/2	Jar	Red/orange ware; external striations; burnt?
3.	106/1	Flint blade	Marbled grey stone; no retouch.
4.	110/1	Bowl	Light orange ware; thickened, flattened rim.
5.	110/2	Bowl?	Red ware; ledge rim.