# The Distribution of Food Preparation Artifacts in Field D at Tall Jalul, Jordan



The Institute of

## Rebecca A. Bates



Office of Research & Creative Scholarship

## Archaeology Siegfried H. Horn Museum

#### Purpose of Research

The Andrews University Institute of Archaeology and the Madaba Plains Project houses many of the artifacts that were found, recorded, sketched, photographed, and brought to the Siegfried H. Horn Museum for further study. These artifacts are used to help archaeologists understand the history of the Madaba Plains, Jordan and its significance to the Bible. Food preparation artifacts like grinders, querns, pounders, mortar and pestles, jar/jug stoppers and fragments, and stone bowls, are some of the most frequently excavated artifacts at Tall Jalul. This poster examines the relationship between domestic living spaces and food preparation artifacts suggesting that the concentration and distribution of these artifacts can give us insight into the use of certain domestic living spaces found in Field D, Squares 1 and 3.

### Methodology

- 1. Artifacts from Squares D1 and D3 were collected, scanned, and edited in Pixelmator for publication.
- 2. Artifacts from Squares D1 and D3 were reviewed and recorded on the publication spreadsheet for further evaluation.
- 3. Unregistered artifacts from Squares D1 and D3 were also included on the publication spreadsheet after a significant number were discovered.
- 4. All recorded artifacts were organized by type, pail number, location, location certainty, registration number, purpose, levels, and GPS coordinates where available.
- 5. The food preparation artifacts found in Square D1 and D3 were mapped on a two-dimensional diagram based on each type of artifact relative to its location described in the field notes.
- 6. Google Sketch Up was used to convert the two-dimensional map into a three-dimensional map using the recorded elevations or a relative elevation within its locus.
- 7. Additional charts were created in Google Charts to show the relationship between individual artifacts and their concentration.

#### Academic Sponsors

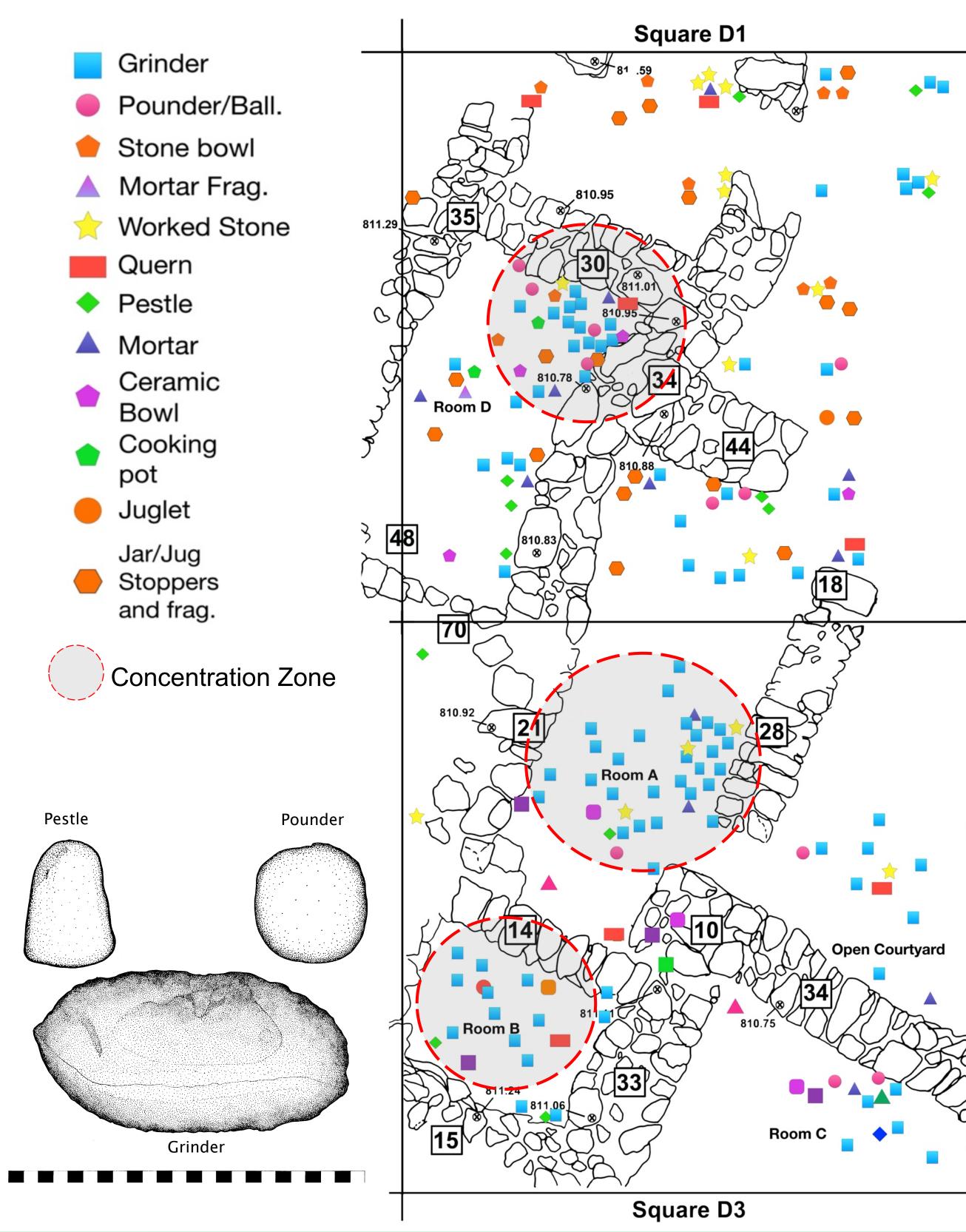
Dr. Randall Younker, Dr. Paul Ray, Dr. Robert Bates

#### Results

There were twelve different types of food preparation artifacts found in Field D Squares 1 and 3, both registered and unregistered. Of the 193 artifacts found in both squares, 97 were grinders. Grinders are basalt hand tools used for grinding grain that come in a variety of types and sizes often with rounded ends weathered with a quern or lower grinding stone. Querns are large, often flat basalt stones, that are used in conjunction with a grinder to turn wheat into flour. Seven querns were found in both squares. There were 17 worked stones, which are stones shaped and used in various ways for grinding or pounding grain, herbs, medicines, etc., but their precise function is uncertain. There were also 12 pounders/ballista found with the grinders. Pounders are small basalt tools also used for grinding grain by hand as well as refinishing other stone tools, hammering, or as slingstones. Ten stone and four ceramic bowls were found in conjunction with pounders and worked stones they are included with the food preparation tools. These basalt bowls function much like mortars to contain the pounded grain or herbs. There were also 12 pestles and 13 mortars in these squares. A pestle, much like a grinder, is a smaller basalt or limestone tool used in grinding or pounding grain, herbs, or cosmetics usually with mortars. Mortars are basalt or limestone shallow bowls tool with small supporting legs or feet used for holding grain or herbs ground by the pestle.

#### Conclusions

Three main concentrations of food preparation artifacts were found in Rooms A, B, and D. In Room A, there were 36 grinders, four worked stones, three mortars, three pounders, three pestles, one quern, and a stone bowl, for a total of 51. In Room B, there were 14 grinders, two pestles and one quern, for a total of 17. In Room D, there were 20 grinders, one worked stone, five mortars, four pounders, three pestles, one quern, and two stone bowls, three ceramic bowls, five jar stoppers, and two cooking pots for a total of 36. This shows that Rooms A, B, and D were most likely used turning grain into flour. However, the courtyard also had 11 food preparation artifacts and Room C had eight. This suggests that although there were fewer artifacts in these rooms, they were still used for food/flour production albeit to a lesser degree. The presence of these artifacts alludes to the possibility that additional food storage vessels should be present as well. Further study of the ceramics is needed in Square 4 and the surrounding squares to better understand the distribution of food preparation artifacts at Tall Jalul.



#### Selected Bibliography

Ray, Paul J, and Bishah Ghazi. Small Finds: Studies of Bone, Iron, Glass, Figurines, and Stone Objects from Tell Hesban and Vicinity. Andrews University Press, 2009. Herr, Larry G, et al., eds. Madaba Plains Project: The 1992 Season at Tell El-'umeiri and Subsequent Studies. Andrews University Press in Cooperation with the Institute of Archaeology, 2000.

Herr, Larry G, et al., eds. Madaba Plains Project: The 1996 and 1998 Seasons at Tall Al-'Umayri and Subsequent Studies. Andrews University Press in Cooperation with the Institute of Archaeology, Andrews University, 2014.