## Expedition to the Dead Sea Plain

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In 1973, R. Thomas Schaub, together with his colleague Walter Rast, designed and initiated the interdisciplinary research program of the Expedition to the Dead Sea Plain (EDSP) to investigate the rise of Early Bronze Age (EBA; 3600-2000 BCE) urban society, with a distinct focus on links between environmental and social systems. Funded by a Wenner-Gren Foundation Historical Archive Grant, and in cooperation with the Carnegie Museum for Natural History, in 2018 we began curating the archives of the late R. Thomas Schaub (Fig. 1). Organizing and processing this archival collection is integral to a more complete understanding of the history of archaeology along the Dead Sea Plain in Jordan, as well as the emergence of EBA small-scale urbanism. Schaub's correspondence, research reports, photographs, and presentations chronicle their efforts to transform southern Levantine archaeology into



Fig. 1. University of Notre Dame student Madeline Kohl processing the Schaub archives. (Photo by M. S. Chesson.)



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an anthropologically grounded discipline. During the pandemic, archival processing has continued with an emphasis on the cemetery excavation at Bab adh-Dhra', whose history encompasses the emergence, florescence, and decline of Jordan's earliest fortified communities. Mortuary practices shifted with transformations in the lives of EBA peoples as they moved from small villages, hamlets, and farmsteads into the earliest walled towns and cities. The EDSP's 1970s and 1980s excavations of the cemetery promises to transform our understanding of this dynamic society. The crucial archival work moves us closer to analyzing and publishing these scientific results from the EDSP's research at this extraordinary site.

Due to delays arising from the pandemic and before the Department of Antiquities developed and implemented a revised drone policy, we have been unable to monitor change (natural and anthropogenic) over time at the Early Bronze Dead Sea Plain sites. In cooperation with the Jordanian Department of Antiquities, we have turned to high-resolution satellite imagery to continue our work. Birds'-eye views of these sites and landscapes provide excellent vantage points for understanding the past and assessing anthropomorphic change over time. With a grant from the DePaul Department of Anthropology we acquired high-resolution satellite imagery (WorldView 30 cm and QuickBird 40-60cm, from 2007, 2011, and 2014), KH-9 Hexagon imagery (1971–1986), and a series of aerial photographs (2008–2019) of the three cemeteries at Bab adh-Dhra', An Naq, and Fifa (Fig. 2). Employing



Fig. 2. Comparison of one area of Bab adh-Dhra' in 2021 (left, ©Airbus DS 2021) and 1974 (right, KH-9 HEXAGON image courtesy of the U.S. Geological Survey.)

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the "brute force" approach to regional remote sensing-based archaeological research (Casana 2014; Casana 2020) our collaborative team is inspecting images from the three study areas systematically and methodically and comparing them with the drone imagery collected from 2012–2016. Our hope is that the results of this research will offer a model for future remote sensing-based archaeological and heritage monitoring efforts in Jordan and beyond.

Unable to carry out research during a year of leave, Kersel also accomplished a complete revision of the Follow the Pots website (followthepotsproject.org).

## References

Casana, J. 2014. "Regional-Scale Archaeological Remote Sensing in the Age of Big Data: Automated Detection Versus Brute Force Methods." *Advances in Archaeological Practice* 2 (3): 222-233.

Casana, J. 2020. "Global-Scale Archaeological Prospection Using CORONA Satellite Imagery: Automated, Crowd-Sourced, and Expert-Led Approaches." *Journal of Field Archaeology* 45 (sup1): S89–S100.

Project website: expeditiondeadseaplain.org