Geophysical Research Abstracts
Vol. 20, EGU2018-8796, 2018
EGU General Assembly 2018

Middle to Late Epipaleolithic Hunter-Gatherer Encampments on a Dune Dam Structure, along Dunefield Margin Water Bodies of the Northwestern Negev Dunefield , Israel

Joel Roskin (1), Ofer Marder (2), Revital Bookman (3), David E. Friesem (4), Iris Groman-Yaroslavski (5), Lotan Edeltin (2), Naomi Porat (6), Elisabetta Boaretto (7), and Jacob Vardi (8)

(1) Dept. of Maritime Civilizations, Charney School of Marine Studies and the Leon Recanati Institute for Maritime Studies (RIMS), University of Haifa 188, Aba-Hushi Avenue, Mt. Carmel, Israel. , (2) Bible Archaeology and Ancient Near East Department. Ben-Gurion University of the Negev, P.O. Box 653, Beer-Sheva 8410501, Israel, (3) Dept. of Marine Geosciences, Charney School of Marine Studies, University of Haifa 188 Aba-Hushi Avenue, Mt. Carmel, Israel. , (4) McDonald Institute for Archaeological Research, University of Cambridge Downing Street, CB2 3ER, Cambridge, UK, (5) The Use-Wear Analysis Laboratory, Zinman Institute of Archaeology, University of Haifa 188 Aba-Hushi Avenue, Mount Carmel 3498837, Israel, (6) Geological Survey of Israel Geological Survey of Israel, 30 Malkhe Israel Street, Jerusalem 95501, Israel. naomi.porat@gsi.gov.il, (7) D-REAMS Radiocarbon Dating Laboratory, Scientific Archaeology Unit, Weizmann Institute of Science, 7610001 Rehovot. , (8) Prehistory Branch, Excavations, Surveys & Research Department, Israel Antiquities, P.O. Box 586, Jerusalem 91004, Jerusalem, Israel

This study presents distinct and small task-specific sites associated with the Middle to Late Epipalaeolithic period exposed during a salvage excavation at the site of Ashalim at the fringe of the northwestern Negev desert dunefield (Israel). Six areas spanning the Geometric-Kebaran to Harifian periods were excavated upon a unique 4 m high and 100 m wide linear structure.

The structure was a vegetated linear dune that blocked the underlying drainage system and led to the development of standing bodies of water which, together with the exposed wet bottom provided fauna and flora resources during the winter and spring. The relatively large number of sickle blades and lunates uncovered during the excavations suggest cereal consumption combined with hunting activities.

Ten optically-stimulated luminescence (OSL) measurements conducted for the dune structure indicate that the occupations of the site post-date $\sim$15.5$\pm$3.1 ka BP, while bodies of water were present intermittently until at least $\sim$11 ka BP, possibly even after the Harifian occupation. Two radiocarbon dating taken for excavated ostrich eggshell fragments further support this time range. The current study demonstrates how aeolian-fluvial interactions, and not necessarily a wetter climate, are important for forming conditions conducive for occupation by prehistoric groups in arid zones.