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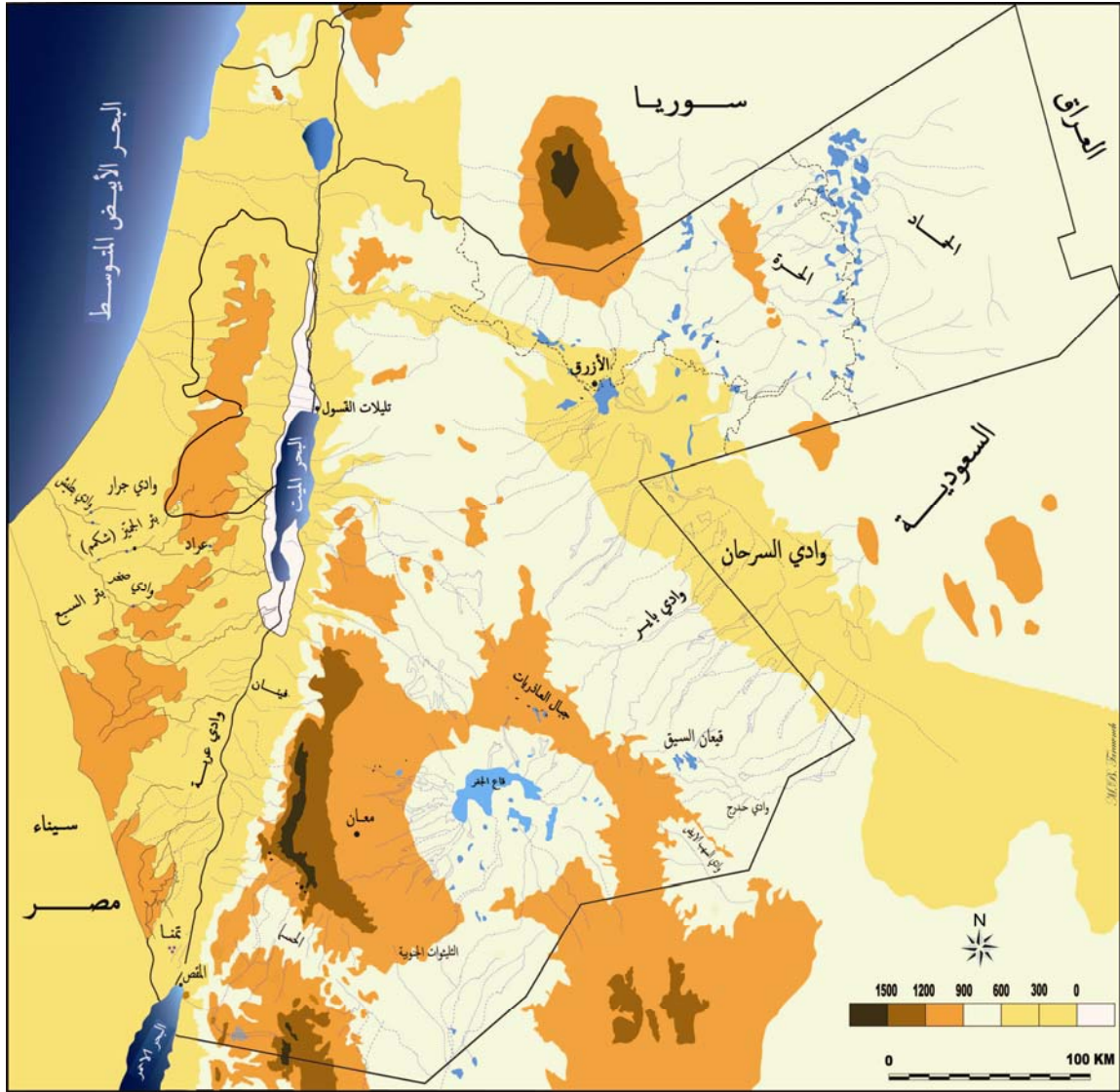
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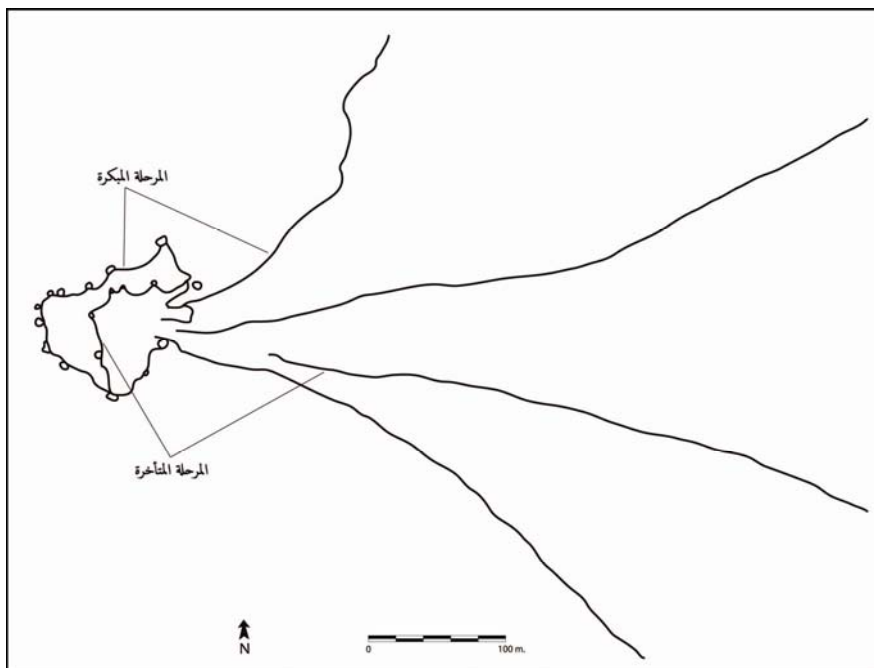
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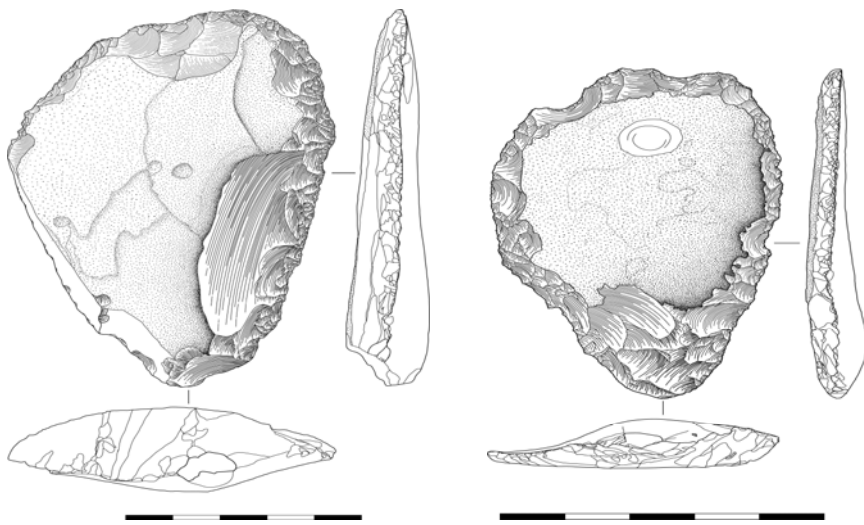
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Abu-Azizeh W. 2011 –Structures culturelles et funéraires des IV-III^{ème} millénaires dans le sud jordanien désertique: l'occupation de la région de Al-Thulaythuwat. In *Pierres levées, stèles anthropomorphes et dolmens*. Series 2317Maison de l'Orient Méditerranéen ed. T. Steimer-Herbet. BAR.

Al-Maqddasi S. 1967. *Bibliotheca Geographorum Arabicorum: Descriptio Imperii Moslemici*. ed. De-Goeje, M. Lugduni Batavorum: E.J. Brill.

Alon D. 1977. A Chalcolithic Temple at Gilath. *Biblical Archaeologist* 40: 63-65.

Baird D, A. Garrard, L. Martin, and K. Wright. 1992. Prehistoric Environment and Settlement in the Azraq Basin: An Interim Report on the 1989 Excavation Season. *Levant* 24: 1-31.

- Barber E. 1991. *Prehistoric Textiles, The Development of Cloth in the Neolithic and Bronze Ages with Special Reference to the Aegean*. Princeton: Princeton University Press.
- Bennett W, J. Sollberger, and A. Gettys. 1989. Flint Tools. In *Tell el Hesi: The Persian Period (Stratum V)*. 231-256. eds. Bennett, W. J. Blakely. Winona Lake: Eisenbrauns.
- Betts A. 1989. The Pre-Pottery Neolithic B Period in Eastern Jordan. *Paléorient* 15 /1: 147-153.
- Betts A. 1992. Tell el-Hibr: A Rock Shelter Occupation of the Fourth Millennium B.C.E. in the Jordanian Badiya. *Bulletin of the American Schools of Oriental Research* 287: 5-23.
- Betts A. 1998. Dhuweila: Stratigraphy and Construction. In *The Harra and the Hamad*. 1: 37-58. eds. Betts, A., S. Colledge, L. Martin, C. McCartney, K. Wright, V. Yagodin. Sheffield: Sheffield Academic Press.
- Betts A. 2007. Things to do with Sheep and Goats: Neolithic Hunter-Forager-Herders in North Arabia. In *The Archaeology of Mobility. Nomads in the Old and the New World*. Monograph of the Cotsen Institute. Chapter 2: eds. Wendrich, W. and H. Barnard. Los Angeles: University of California.
- Betts A. and M. Tarawneh 2010. Changing Patterns of Land Use and Subsistence in the Badiyat al-Sham in the Late Neolithic and Chalcolithic Periods: new data from Burqu and Bayir. In *Hauran V La Syrie Du Sud Du Néolithique À L'antiquité Tardive Recherches* 2007. Vol 1: 41-68. eds. Al-Maqdissi M. Braemer F. Dentzer J-M. Beyrouth.
- Bourke S. 2001. The Chalcolithic Period. In *The Archaeology of Jordan*. 107-162. eds. MacDonald, B., R. Adams, and P. Bienkowski. Sheffield: Sheffield Academic Press.
- Brentjes B. 1968. *Von Schanidar bis Akkad*. Leipzig: Urania-Verlag.
- Drucks A, and V. Tsiferis. 1970. Tel Azor. *Revue Biblique* 77: 578.
- Eliezer O, and I. Gilead. 1981. Chalcolithic Sites in Northeastern Sinai. *Tel Aviv* 8: 25-41.
- Epstein C. 1985. Laden Animal Figure from Chalcolithic Palestine. *Bulletin of the American Schools of Oriental Research* 258: 53-60.
- Eddy F, and F. Wendorf. 1998. Prehistoric pastoral nomads in the Sinai. *Sahara* 10: 7-20.
- Eddy F, and F. Wendorf. 1999. *An Archaeological Investigation of the Central Sinai, Egypt*. Cairo: American Research Centre in Egypt.
- Fletcher R. 2008. Some Spatial Analysis of Chalcolithic Settlement in Southern Israel. *Journal of Archaeological Science* 35: 2048-2058.
- Fujii S. 2002. A Brief Note on the 2001-2002 Winter Season Survey of the al-Jafr Basin in Southern Jordan. *Annual of the Department of Antiquities of Jordan* 46: 41-49.
- Gilead I. 1989. Grar: A Chalcolithic Site in the Northern Negev, Israel. *Journal of Field Archaeology* 16 /4: 377-394.
- Gilead I. 1992. Farmers and Herders in Southern Israel During the Chalcolithic Period. In *Pastoralism in the Levant, Archaeological materials in Anthropological Perspective*.

- 29-41. eds. Bar-Yosef, O., and A. Khazanov. Wisconsin: James Knight.
- Gilead I. 1995. *Grar: A Chalcolithic Sites in the Northern Negev*. Beer-Sheva. Ben-Gurion University of the Negev Press..
- Gilead I, and Y. Goren. 1986. Stations of the Chalcolithic Period in Nahal Sekher, Northern Negev. *Paléorient* 12 /1: 83-90.
- Golden J. 2002. The Origins of the Metal Trade in the Eastern Mediterranean: Social Organization of Production in the Early Copper Industries. In *Egypt and the Levant, Interrelations from the 4th through the Early 3rd Millennium BCE*. eds. Edwin, C., M. Brink and T. Levy. Leicester: Leicester University Press.
- Grigson C. 1987. Shiqmim: Pastoralism and other Aspects of Animal Management in the Chalcolithic of the Northern Negev. In *Shiqmim I, Studies Concerning Chalcolithic Societies in the Northern Negev Desert, Israel (1982-1984)*. 1: 219-241. eds. Levy, T. BAR International Series 356. Oxford: B.A.R.
- Hauptmann A. 1992. Archaeology of Jordan. *American Journal of Archaeology* 96: 510-511.
- Helmer D, and J.-D. Vigne. 2007. Was milk a “secondary product” in the Old World Neolithisation process? Its role in the domestication of cattle, sheep and goats. *Anthropozoologica* 42 /2: 9-40.
- Helms S. and A. Betts. 1987. The desert Kites of the Badiyat esh-Sham and North Arabia. *Paléorient* 13 /1: 41-76.
- Henry D. 1992. Seasonal Movements of Fourth Millennium Pastoral Nomads in Wadi Hisma. *Studies in the History and Archaeology of Jordan* 4: 137-141.
- Henry D. 1995. *Prehistoric Cultural Ecology and Evolution, Insights from Southern Jordan*. New York: Plenum Press.
- Henry D, P. Turnbull, A. Emery-Barbier, and A. Leroi-Gourhan. 1985. Archaeological and Faunal Evidence from Natufian and Timnian Sites in Southern Jordan. *Bulletin of the American Schools of Oriental Research* 257: 54-64.
- Khalil L, and R. Eichmann. 2001. Archaeological Survey and Excavation at the Wadi al-Yutum and Magass Area-al-'Aqaba (ASEYM): a Preliminary Report on the Second Season in 2000. *Annual of the Department of Antiquities of Jordan* 45: 195-204.
- Khalil L, K. Schmidt, M. Atoom, N. Benecke, Th. Hikade, T. Kramer, A. al-Manaseer, B. Muller-Neuhof, R. Neef, G. Nockemann, K. Pfeiffer, D. Rokitta, M. Ronza, and M. Tarboush. 2003. Archaeological Survey and Excavations at the Wadi al-Yutum and al-Magass Area-al-'Aqaba (ASEYM): a Preliminary Report on the Third and Fourth Seasons Excavations at Tall Hujayrat al-Ghuzlan in 2002 and 2003, Wadi al-Yutum. *Annual of the Department of Antiquities of Jordan* 47: 159-182.
- Kerner S. 1992. Abu Snesleh. *American Journal of Archaeology* 96: 513.
- Kerner S. 2001. *Das Chalkolithikum in der südlichen Levante, Die Entwicklung handwerklicher Spezialisierung und ihre Beziehung zu gesellschaftlicher Komplexität*. Orient-Archäologie Band 8. Berlin: Verlag Marie Leidorf GmbH.

- Khazanov A. 1984. *Nomads and the Outside World*. Cambridge: Cambridge University Press.
- Köhler-Rollefson I. 1992. A Model for the Development of Nomadic Pastoralism on the Transjordanian Plateau. In *Pastoralism in the Levant, Archaeological Materials in Anthropological Perspectives*. 11-18. eds. Bar-Yosef O., and A. Khazanov. Wisconsin: James Knight.
- Kupper R. 1957. *Les nomads en Mésopotamie au temps des rois de Mari*. Paris: Société d'Édition "Les Belles Lettres".
- Lehmann G, R. Lamprichs, S. Kerner and R. Bernbeck. 1991. The 1990 Excavations at Abu Snesleh: Preliminary Report. *Annual of the Department of Antiquities of Jordan* 35: 41-65.
- Levy T. 1981. *Chalcolithic Settlement and Subsistence in the Northern Negev Desert*. Ann Arbor: University Microfilms.
- Levy T. 1983. The Emergence of Specialized Pastoralism in the Southern Levant. *World Archaeology* 15 /1: 15-36.
- Levy T. 1992. Transhumance, Subsistence, and Social Evolution in the Northern Negev Desert. In *Pastoralism in the Levant, Archaeological materials in Anthropological Perspectives*. 68-82. eds. Bar-Yosef O., and A. Khazanov. Wisconsin: James Knight.
- Levy T, and D. Alon. 1983. Chalcolithic Settlement Patterns in the Northern Negev Desert. *Current Anthropology* 24: 105-107.
- Levy T. and Alon, D. 1987. Settlement Patterns along the Nahal Beer Sheva- Lower Nahal Besor: Models of Subsistence in the Northern Negev. In *Shiqmim I, Studies Concerning Chalcolithic Societies in the Northern Negev Desert, Israel (1982-1984)*. 1: 45-138. ed. Levy, T. BAR International Series 356. Oxford: B.A.R.
- Levy T, and P. Goldberg. 1987. The Environmental setting of the northern Negev. In *Shiqmim I, Studies Concerning Chalcolithic Societies in the Northern Negev Desert, Israel (1982-1984)*. 1: 1-22. ed. Levy, T. BAR International Series 356. Oxford: B.A.R.
- Lovell J. 2001. *The Late Neolithic and Chalcolithic Periods in the Southern Levant*. Oxford: BAR Int. Ser. 947.
- Lovell J, G. Dollfus and Z. Kafafi. 2007. The Ceramics of the Late Neolithic and Chalcolithic: Abu Hamid and the Burnished Tradition. *Paléorient* 33 /1: 51-76.
- MacDonald B. 1988. The Pottery Neolithic and Chalcolithic Periods. In *The Wadi al-Hasa Archaeological Survey 1979-1983, West Central Jordan*. 128-138. eds. MacDonald, B. Waterloo: Wilfrid Laurier University Press.
- Mahasneh H, and H. Gebel. 2008. The Eastern Jafr Joint Archaeological Project: the 2001 and 2006 Surveys in Wadi as-Sahab al-Abyad, Southern Jordan. *Annual of the Department of Antiquities of Jordan* 52: 35-49.
- Martin L. 1998. The Animal Bones. In *The Harra and the Hamad, Excavations and Surveys in the Eastern Jordan*. 1: 159-184. Betts, A., S. Colledge, L. Martin, C.

- McCartney, K. Wright, V. Yagodin. Sheffield: Sheffield Archaeological Monographs.
- Martin L. 1999. Mammal Remains from the Eastern Jordanian Neolithic, and the Nature of Caprine herding in the Steppe. *Paléorient* 25 /2: 87-104.
- McCartney C, and A. Betts. 1998. Dhuweila: Chipped Stone. In *The Harra and the Hamad, Excavations and Surveys in the Eastern Jordan*. 1: 59-119. Betts, A., S. Colledge, L. Martin, C. McCartney, K. Wright, V. Yagodin. Sheffield: Sheffield Academic Press.
- McConaughy M. 1979. *Formal and Functional Analysis of Chipped Stone Tools from Bab edh Dhra*. Ann Arbor: University Microfilms.
- Mumford G, and S. Parcak. 2003. Pharaonic Ventures into South Sinai: el-Markha Plain Site 346. *Journal of Egyptian Archaeology* 89: 83-89.
- Oren D, and I. Gilead. 1981. Chalcolithic Sites in the Northeastern Sinai. *Tel Aviv* 8: 25-44.
- Ovadia E. 1992. The Domestication of the Ass and Pack Transport by Animals: A Case of Technological Change. In *Pastoralism in the Levant, Archaeological materials in Anthropological Perspectives*. 19-28. eds. Bar-Yosef O., and A. Khazanov. Wisconsin: James Knight.
- Papalas C, J. Eighmey and G. Clark. 1997. Rock Ring: A Preliminary Report on Chalcolithic and EB I Settlement in the Wadi Hasa Drainage, West-Central Jordan. In *The Prehistory of Jordan, Perspectives from 1997*. 2: 429-439. eds. Gebel, H. Z. Kafafi and G. Rollefson. Berlin: Ex-Orient.
- Parr P, J. Zarins, M. Ibrahim, J. Waechter, A. Garrard, C. Clarke, M. Bidmead, and H. al-Badr. 1978. Preliminary Report on the Second Phase of the Northern Province Survey 1397/1977. *Atlat* 2: 29-50.
- Perrot J. 1961. Notes and News: Gat-Guvrin. *Israel Exploration Journal* 11: 76.
- Perrot J. 1962. Chronique Archeologique: Nahal Besor. *Revue Biblique* LXIX: 388-391.
- Quintero L, P. Wilke, and G. Rollefson. 2002. From Flint Mine to Fan Scraper: The Late Prehistoric Jafr Industrial Complex. *Bulletin of the American Schools of Oriental Research* 327: 17-48.
- Rollefson G, and I. Köhler-Rollefson. 1993. PPNC Adaptations in the first half of the 6th millennium. *Paléorient* 19 /1: 33-42
- Rosen S. 1983. Tabular Scraper trade: A Model of Material Culture Dispersion. *Bulletin of the American Schools of Oriental Research* 249: 79-86..
- Rosen S. 1987. The Potentials of Lithic Analysis in the Chalcolithic of the Northern Negev. In *Shiqmim I, Studies Concerning Chalcolithic Societies in the Northern Negev Desert, Israel (1982-1984)*. 1: 295-313. ed. Levy, T. BAR International Series 356. Oxford: B.A.R.
- Rosen S. 1988. Notes on the Origins of Pastoral Nomadism: a Case Study from the Negev and Sinai. *Current Anthropology* 29: 498-506.
- Rosen S. 1997. *Lithics After the Stone Age*. London: Sage.

- Rosen S. 2002a. *A Sacred Landscape: Preliminary Analysis of the Shrine and Tumulus System at Ramat Saharonim, Ramon Crater, Negev*. Presented at American Schools of Oriental Research 2002 Annual Meeting.
- Rosen S. 2002b. The Evolution of Pastoral Nomadic Systems in the Southern Levantine Periphery. In *Quest of Ancient Settlements and Landscapes. Archaeological Studies in Honour of Ram Gophna*. 23-44. eds. Brink, E., E. Yannai. Tel Aviv: Ramot Publishing.
- Rosen S, E. Tykot and M. Gottesman. 2005. Long Distance Trinket Trade: Early Bronze Age Obsidian from the Negev. *Journal of Archaeological Science* 32: 775-784.
- Rosen S. 2008. Desert Pastoral Nomadism in the *Longue Durée* A Case Study from the Negev and the Southern Levantine Deserts. In *The Archaeology of Mobility: Old World and New World Nomadism: Costen Institute of Archaeology*. 115-140. eds. Barnard, H and Wendrich, W UCLA, Los Angeles.
- Rothenberg B. 1971. An Archaeological Survey of South Sinai. *Palestine Exploration Quarterly* 103: 4-29.
- Rowan Y. 2006. The Chipped Stone Assemblage at Gilat. In *Archaeology, Anthropology and Cult: The Sanctuary at Gilat, Israel*. 507-574. eds. Levy, T. London: Equinox.
- Sherratt A. 1981. Plough and Pastoralism: Aspects of the Secondary Products Revolution. In *Patterns of the Past: Studies in Honour of David Clarke*. 1: 261-305. eds. Hodder, I., G. Issac, and N. Hammond. Cambridge: The University Press.
- Smith A, M. Stevens, and T. Niemi. 1997. The Southeast Araba Archaeological Survey: A Preliminary Report of the 1994 Season. *Bulletin of the American Schools of Oriental Research*. 305: 45-71.
- Tarawneh M. 2007. *Pastoral Nomadism in the Southern Levant during the Chalcolithic Period: New Evidence from Eastern Bayir*. Unpublished PhD Thesis. The University of Sydney.
- Unger-Hamilton R. 1991. Microwear Analysis of Scrapers and "Sickle Blades." In *Excavations at Jawa 1972-1986: Stratigraphy, Pottery, and other Finds*. 1: ed. Betts, A. Edinburgh: University of Edinburgh Press.
- Wasse A, and G. Rollefson. 2005. The Wadi Sirhan Project: Report on the 2002 Archaeological Reconnaissance of Wadi Hudruj and Jabal Tharwa, Jordan. *Levant* 37: 1-20.
- Winter-Livneh R, T. Svoray, and I. Gilead. 2010. Settlement Patterns, Social Complexity and Agricultural Strategies during the Chalcolithic Period in the Northern Negev, Israel. *Journal of Archaeological Science* 37: 284-294.

The Early Emergence of Pastoral Nomadism in South Eastern Jordan

Mohammad Barakat Tarawneh*

ABSTRACT

This paper discusses the most important views on the early emergence of Bedouin life in the southern Levant and the latest results of the archaeological activities in south eastern Jordan, which have changed many concepts in this topic, such as Bedouin migration for long distances, the role of manufacturing and trade of tabular scrapers in contact and communications in southern Levant, the effect of permanent settlements in the Bedouin of the southern Levant and the nature of the relationship between groups of nomads and villagers. This research sheds light on the economy of nomadic groups and the most important architectural remains and archaeological finds left by nomadic groups that traveled in the southern Levant from the Late Neolithic period to the end of the Chalcolithic period and the beginning of the Bronze Ages.

KEYWORDS: Pastoral Nomadism, Southern Levant, Negev, Tabular Scrapers, Eastern Bayir, Southern Thulaithwat.

* Archaeology Dept., Al-Hussein Ben Talal University.
Received on 12/12/2011 and accepted for publication on 24/5/2012.