by Burton MacDonald

The Southern Ghors and Northeast 'Araba Archaeological Survey, Jordan was in the field from October 14 to December 5, 1986. A total of 39 days were spent in actual infield work. The survey team was located in a Jordan Valley Authority housing complex in Mazra' to the north of the survey area. The team consisted of G.A. Clark, Department of Anthropology, Arizona State University, Tempe; two graduate students, namely M. Gregory and M. Neeley, of the same Department and University; R. Adams, graduate student, Department of Religion and Culture, Wilfrid Laurier University, Waterloo, Ontario; N. Beqa'in, Department of Antiquities Representative; and the writer.

The survey territory extends from es-Safi in the north to Wadi el-Feidan in the south (Fig. 1). Geomorphologically, this area is easily divided into two sections by the pronounced, fault-bounded escarpement: 1) the north section extends from Ghor es-Safi and the Dead Sea as far south as Wadi Khneizir; 2) the south section extends from the edge of the escarpment, just to the south of Wadi Khneizir, to Wadi el-Feidan. From north to south, elevations vary from -392 m northwest of es-Safi to just above sea-level at Wadi el-Feidan. Thus, a rise of over 400 m over a distance of a little more than 40 kilometers. From west to east, the rise is even more pronounced.

For the purposes of actual infield work the territory was stratified on the basis of the Jordan 1:50,000 scale maps (Series K737) into five regions: 1) agricultural land, farms, orchards, and plantations; 2) gravels, gravel/cobble veneer, and colluvium; 3) sandy areas, including dunes; 4) piedmont (the dissected slopes of the wadi edges of *Graben*; and 5) wadi beds and their ridges. The strata frequently determined the methodology used in surveying an area. Pedestrian transects can be employed quite easily in strata one, two, and

three. However, such is not the case for strata four and five.

A total of 240 sites were surveyed. Of this number 42.5% are located in the Southern Ghors while 57.5% are located on the escarpment and southward. Both ceramics and lithics were collected at 60 (25%) sites; ceramics were collected at 123 (51%) additional sites; lithics were collected at 34 (14%) additional sites; neither ceramics nor lithics were collected at 23 (10%) architectural sites.

A preliminary analysis of the materials collected indicates that they date from the Lower/Middle Paleolithic to the Modern Period with some periods unrepresented. In the Southern Ghors, the lithic material collected is representative of the Epipaleolithic through the Early Bronze period. This material is especially abundant in the Feifa and Khneizir regions. There are no earlier lithic materials in the Southern Ghors because this area was covered by Lake Lisan up until around 16,000 B.C. In this same region ceramics from the Neolithic, Chalcolithic, Early Bronze, Iron Age, Nabataean, Roman, Byzantine, Early Islamic, and Late Islamic, especially Mamluk, are present. As is well known from work of W.E. Rast and R.T. Schaub in the area, Early Bronze material is abundant at such major sites as es-Safi, Feifa, and Khneizir. Frequently Chalcolithic/Early Bronze material is also associated. One, surveyed-Nabataean site of great importance is that of Umm el-Tawabin located high on a hill immediately to the southeast of the Wadi el-Hasa gorge. This site is surrounded by a wall which extends for ca. 2 kilometers. On the basis of the sherds collected, it appears to date from the last decades of the 1st century B.C. to the mid-2nd century A.D. Byzantine sherds have been collected from major sites as well as from camps in the area. A newly discovered site from this period is located halfway up a mountain to the north of Wadi el-Hasa and to the northeast of the modern town of es-Safi. One of the structures at the site shows evidence of arches. Preliminary indications are that it could have served as a church and/or monastery during the Byzantine period. Two, well-preserved aqueducts in the Wadis Feifa and Khneizir could date to the same period. The Mamluk period is well represented in the area by the remnants of sugar mills at both es-Safi and Feifa. In the southern segment of the survey territory there is also material representative of the periods mentioned above as well as from earlier periods. Lithic sites, previously reported by T.D. Raikes especially in the Wadi el-Feidan gorge, have been revisited and "sherded". This material appears to date to the Lower/Middle Paleolithic, Epipaleolithic, and Neolithic Periods. At several of these sites there is present Chalcolithic, Early Bronze sherds as well. Evidence of mining and smelting from as early as the Chalcolithic-Early Bronze period is also well represented in both the Wadis el-Feidan and el-Ghuweib. (This is being investigated by a team from the German Mining Museum at Bochum, West Germany.) Moreover, there is evidence of ancient farming and camping along the terraces in these wadis. Lithic materials which appear to date from the Epipaleolithic, Neolithic, Chalcolithic, and Early Bronze were collected in significant numbers in Wadi ed-Dahal. Several major, but as yet unreported, Nabataean and Byzantine sites were surveyed along the "Old Road" between Wadi ed-Dahal and Wadi el-Ghuweib.

One desire of the survey was to relate

the work done in the Southern Ghors with that completed by the Wadi el-Hasa Archaeological Survey (1979-1983) on the plateau south of Wadi el-Hasa to the east. Two transects were carried out from the plateau to the east to the Southern Ghors: 1) between Wadi el-Hasa and Wadi Madsus esh-Shamali: and 2) between Wadi Madsus esh-Shamali and Wadi Umm Jufna. However, the mountains to the east of the Southern Ghors made these transects particularly difficult. The elevations range from -392 to -300 m in the Southern Ghors to more than +1000 m in the mountains to the east of the Southern Ghors and northwest of Tafila. This rise in elevation takes place over a distance of less than 10 kilometers. However, more success has been achieved in connecting the two regions especially in the area immediately south of Wadi Umm Jufna. Trails along and within the Wadis Umruq, Khneizir, Tilah, and ed-Dahal make this task much easier.

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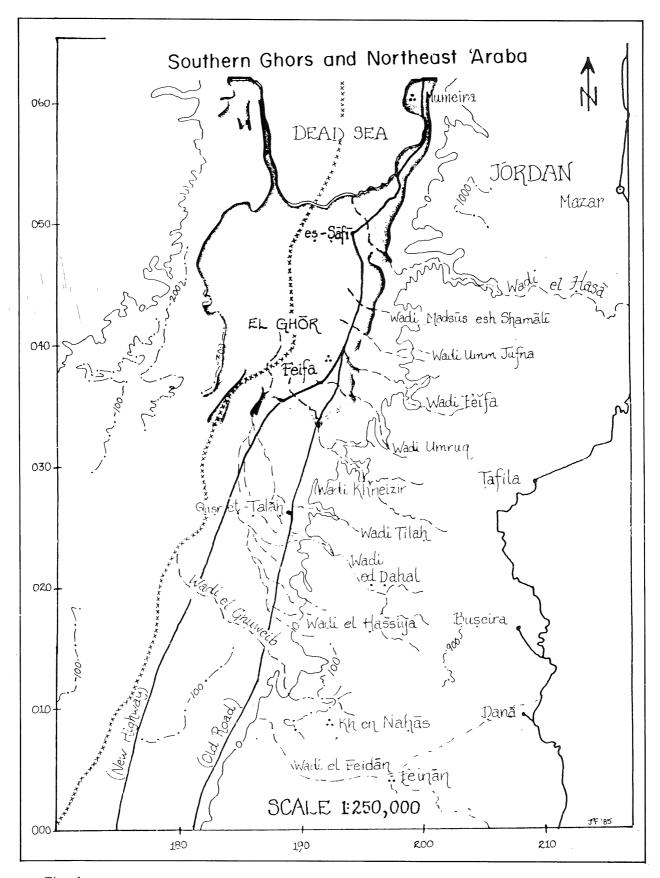


Fig. 1