

## The Ṭafila-Buṣayra Archaeological Survey, West-Central Jordan: Phases 1, 2, and 3 (1999, 2000, and 2001 Seasons)

### Introduction

The Ṭafila-Buṣayra Archaeological Survey (TBAS) is a four-phase project. Three of the phases consisted of infield seasons in 1999, 2000, and 2001. The fourth phase consists of the publication of a final report on the project. Preliminary reports on all three, infield seasons have been published (MacDonald *et al.* 2000; 2001; MacDonald and Sawtell 2002).<sup>1</sup>

### Topography and Geology of the Survey Territory

The survey area is located in the Highlands at the Eastern Rim of the Wādī ‘Arabah-Jordan Graben (Bender 1974; 1975). The wadis in the western portion of the Highlands are oriented towards the northwest and the west. These deep valleys are separated by rugged hills. In the words of Tarawneh, “the topography reflects a degraded Wādī ‘Arabah facing escarpment in the west, with deeply incised wadis fingering eastwards into a high plateau” (1988: 1). This is true, especially for the region to the west and northwest of Buṣayra.

The Buṣayra Citadel is at an elevation of ca. 1140 metres. Jabal al-Kūlā and Jabal Rās al-Ḥalā, to the west and northeast of the Citadel respectively, rise to elevations of ca. 1258 and 1539m respectively.

The region in which the survey territory is located is underlain by Proterozoic (Upper Pre-Cambrian [ca. 800-600 million BP] through Upper Cretaceous [ca. 70 million BP]) rocks. Overlying this bedrock sequence are unconsolidated Pleistocene and Holocene (ca. 2 million BP

to the present) lacustrine, fluvial, and aeolian sediments as well as Pleistocene (ca. 2 million-10,000 BP) basalt flows (Donahue and Beynon 1988: 26; see also Tarawneh 1988: 2). A good example of that basalt flow is Jabal Rās al-Ḥalā, clearly visible to the northeast of the Buṣayra Citadel.

Tertiary (ca. 65-2 million BP) regional uplift affected the at-Ṭafila and Buṣayra regions. In the same geological period, eastward tilting occurred along the eastern flank of the Wādī ‘Arabah-Dead Sea-Jordan Depression. The resulting landscape is now preserved in the area as the Transjordanian Plateau upon which the basalts erupted. In the words of Tarawneh, “renewed regional uplift, accompanied by remobilization and generation of faults, caused further relative lowering of the western base level, and deep Quaternary incision of drainage took place into the plateau and its superimposed basalt” (1988: 2).

Downcutting of Wādī al-Ḥasā probably began 50 million years ago. Because of the repeated downcutting and fault movement of the Wādī ‘Arabah-Dead Sea-Jordan Depression, it has continued up to the present (Donahue and Beynon 1988: 29). Thus, the wadis in the survey territory have deepened, due to continued downcutting, over the millennia.

### Main Objectives of the Project

The main objectives of the project are: 1) the discovery of archaeological cultural resources in an area of ca. 480km<sup>2</sup> in the region from just west of at-Ṭafila and Buṣayra to-

1 I served as project director for all three seasons. Joining me for the both the 1999 and 2000 infield seasons were A. Bradshaw (St. Francis Xavier University), L. Herr (Canadian University College, College Heights, Alberta), M. Neeley (Montana State University, Bozeman), and S. Quaintance (Kansas State University, Manhattan). W. Sawtell (Queen’s University, Kingston, Ontario) and Z. Salamin (University of Jordan, ‘Ammān) joined me for the 2001 infield season. I. ad-Drous served as representative of the Department of Antiquities for both the 1999 and 2000 infield seasons while J. Darweesh served in that role in 2001. Abu Yousef, Abu Sami, and A. Madi served as project cook in 1999, 2000, and

2001 respectively. In addition to the above, P. Bienkowski (Liverpool Museum, UK), B. Hill (Arizona State University, Tempe), K. Moumani (Natural Resources Authority, Mapping Division, ‘Ammān), and J. Peterson (Marquette University, Milwaukee, Wisconsin) joined the survey team for short periods of time. A. Bradshaw, E. Duggan (St. Francis Xavier University), S. Quaintance, and B. Wyman (St. Francis Xavier University) did most of the work associated with the TBAS data base and web page. M. Neeley drew the lithic while students of L. Herr are responsible for the ceramic drawings.

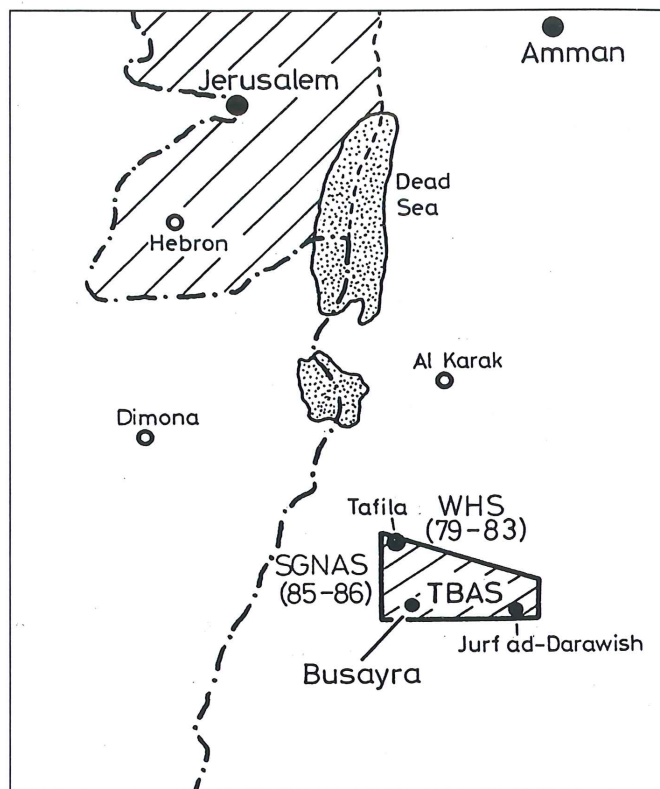
wards Jurf ad-Darāwīsh in the east (FIG. 1); 2) to connect geographically with the territories of both the “Wādī al-Ḥasā Archaeological Survey” (WHS) (1979-1983) (MacDonald *et al.* 1988) and the “Southern Ghawrs and Northeast ‘Arabah Archaeological Survey” (SGNAS) (1985-1986) (MacDonald *et al.* 1992) to the north and west of the TBAS territory respectively (FIG. 1); 3) to provide a statistically valid sample of artifacts and sites in the three topographical zones of the survey territory (FIG. 2); 4) to serve as a “hinterlands” survey of the Buṣayra Citadel, the capital of the Edomites (Amos 1.12; Jer 49.13, 22) (FIG. 3); 5) to “ground-proof” potential archaeological sites on several aerial photographs of the survey territory; 6) to investigate the archaeological materials associated with Pleistocene lakes in the Jurf ad-Darāwīsh region (Moumani 1996; 1997); 7) to draw some of the components of the major architectural sites in the area; and 8) ultimately to write an archaeological history of the entire area from Wādī al-Ḥasā in the north to Buṣayra in the south, and from the Rift Valley on the west to the desert on the east (FIG. 1).

**Methodologies Employed**

The methodologies that TBAS team members employed varied according to the project’s objectives. For example, for statistical purposes, the survey territory is divided into three topographical zones based on the 1:50,000 scale maps: a) Zone 1, the gorges, that is, the area of steep wadis that generally flow in a northwesterly direction towards the Southern Aghwār (Ghawrs) and Northeast ‘Arabah (11 random squares, each measuring 500 x 500m); b) Zone 2, the area of the so-called Edomite Plateau, or part of the Transjordanian Plateau (70 random squares, each measuring 500 x 500m); and c) Zone 3, the desert region immediately to the north of Jurf ad-Darāwīsh (six random squares, each measuring 500 x 500m) (FIG. 2). A fourth zone, namely, Zone Buṣayra, was the area in which TBAS team members carried out the “hinterlands” survey of the Buṣayra Citadel. This zone consists of the territory within a 3-km radius of the Citadel. It comprises portions of topographical Zones 1 and 2. Within this area, 33 randomly chosen squares (200 x 200m) were chosen for intensive investigation (FIG. 3).

The random squares for each of the four zones were chosen on the basis of a Geographic Information System (GIS) database design and cartographic composition by Peter S. Johnson, Center of Applied Spatial Analysis, The University of Arizona, Tucson (coordinates in meters, UTM projection, Zone 36) (FIG. 2). The total areas covered by the random squares in each zone were: Zone 1: 5.73%; Zone 2: 4.78%; Zone 3: 4.23%; and Zone Buṣayra: 4.69%.

For the purpose of surveying the random squares in all zones, TBAS team members located a corner of the

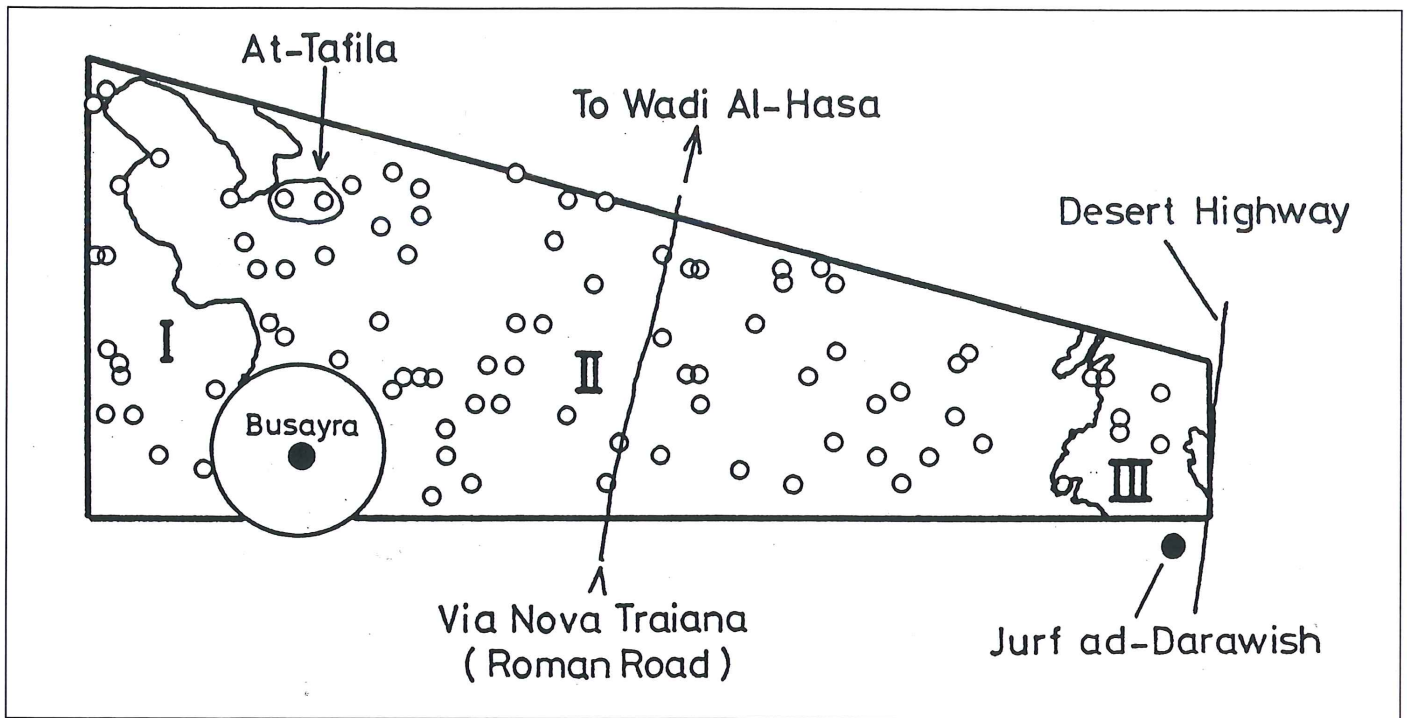


1. The TBAS territory and its relation to the WHS and SGNAS territories.

square using a Global Positioning System (GPS). Once a corner was located, survey team members positioned themselves, usually a distance of 25-50m apart, along one of the lines of the square. Then, with the help of compasses to keep a straight line, team members transected the plot, picking up lithics and sherds in particular. For the 500 x 500m squares, two transects, by a team of four-five persons, were generally required to cover the area. For the 200 x 200m squares in Zone Buṣayra, one transect by the same number of team members was sufficient. TBAS team members recorded the location of all sites within the squares of all topographical zones and plotted them, with the help of the GPS, on maps. Artifacts collected from these sites were recorded separately from the general, surface collections within the square.

TBAS team members used a purposive, survey methodology in their search for sites along the shores of the Pleistocene lakes, namely, Wādī al-Juhayra Lake and Jurf-Burma Lake, in the region of Jurf ad-Darāwīsh. Here, as for other lithic scatters, two collection strategies were utilized in the field. On diffuse density scatters, a random selection of lithic material was collected with an emphasis on locating diagnostic elements. Sites with more concentrated artifact distributions were collected by placing a 1-m radius circle on the site and collecting





2. The TBAS topographical zones.

all material within the circle. This provided a standardized measure of artifact densities.

Relative to the “ground-proofing” of potential sites that D. Kennedy, University of Western Australia, Perth, identified on aerial photos, team members studied the photos and decided how best to access, by means of a 4-wheel drive vehicle, the area depicted on the photo where the potential site was located. Once in the area, team members located themselves topographically on the basis of the photo and drove or walked to the area of the potential site. A judgment was then made as to whether or not the indicated feature was a site. If the feature was judged to be a site, it was then surveyed as such.

Finally, a purposive, survey methodology was used extensively throughout the at-Taḥila-Buṣayra-Jurf ad-Darāwish region. This involved the surveying of all sites adjacent to all random squares transected, interviewing Department of Antiquities personnel relative to the location of sites, and also talking with the farmers, shepherds, and Bedouin who live in the region about the whereabouts of sites. Once a site was located and surveyed, TBAS team members made every effort to insure that the name of the site was ascertained.

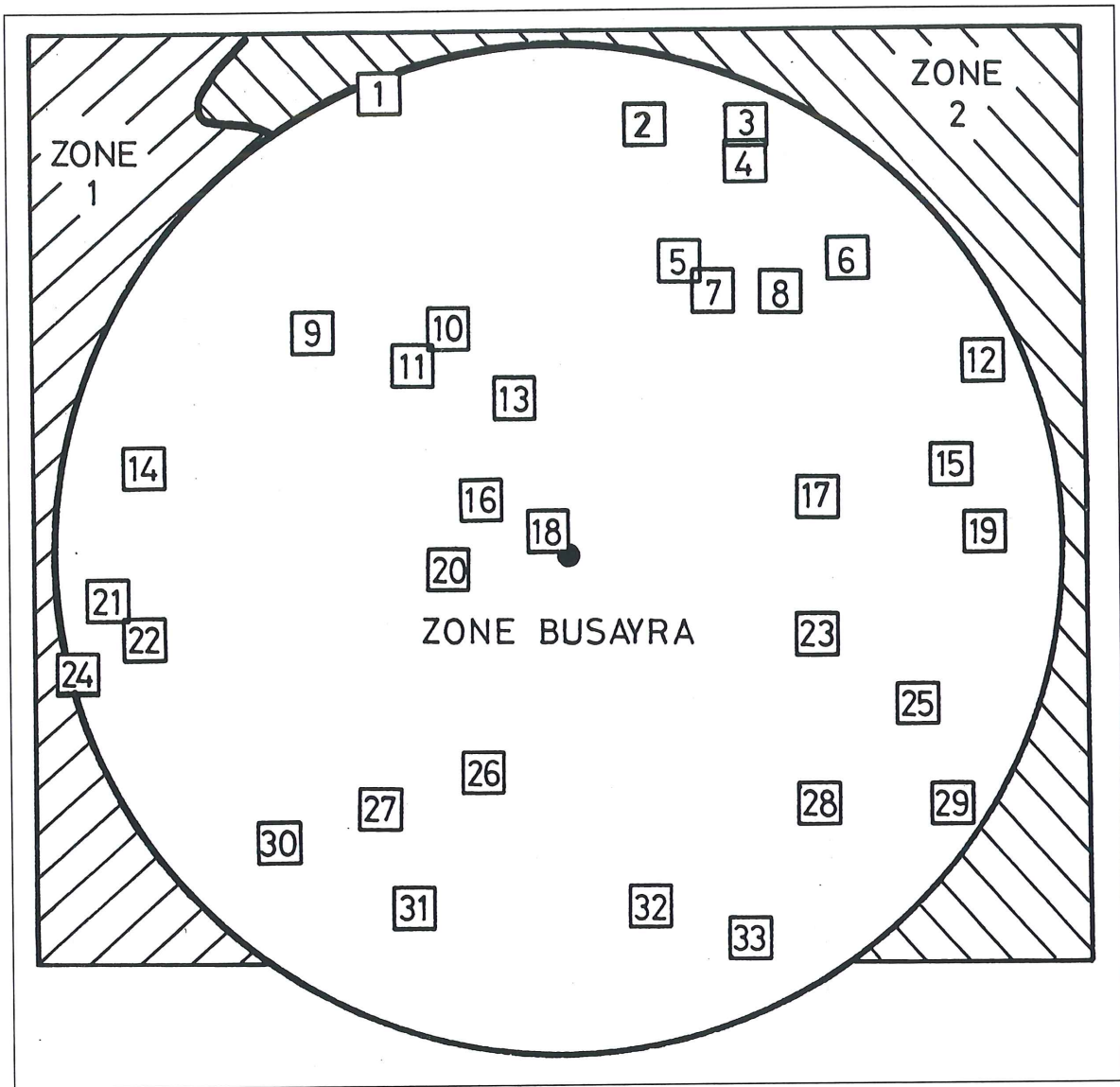
Once a site was “discovered”, by whatever means, it was sherded for artifactual materials, for example, lithics, pottery, and glass, described, and plotted on a map using coordinates obtained from the GPS unit. TBAS team members filled out data sheets on each random square

and site initially in the field. Additional information was added at base-camp and as analyses progressed. This constitutes the TBAS database.

#### Previous Work in the Area

Both Glueck and Hart carried out archaeological survey work in the area previous to the work of the TBAS. The former conducted explorations in the area in 1933 (Glueck 1934: 77-81), 1934 (Glueck 1935: 95-100), and 1936 (Glueck 1939: 19, 25-32, 53) and the latter in 1984 (Hart and Falkner 1985; Hart 1986). These surveys, however, only scratched the surface of the archaeological riches of the area. In addition, Parker (1986: 91-93) visited two sites, namely, the Jurf ad-Darāwish *castellum* and Qaṣr al-Bint, in his survey of the southern sector of the Roman *limes*. Fiema (1993; 1997) carried out work at Khirbat at-Tuwānah along the *Via Nova Traiana* in the central segment of the TBAS survey territory in 1992. Waheeb (1993) conducted a survey of the at-Taḥila-Ghawr Fifā road alignment along Wādī 'Umruq, from the plateau to the southern Aghwār, in the northwest segment of the territory in the same year.

With the exception of Bennett's work at the Buṣayra Citadel (Bennett 1973; 1974; 1975; 1977; 1983; Bienkowski 1997), no full-scale excavations have been carried out in the TBAS area. However, excavators from the University of Mu'ta, Southern Jordan, carried out soundings at three sites, namely, Khirbat al-Ḥārith (TBAS Site



3. Zone Buşayra.

1), TBAS Site 12, and as-Sala‘/Sela (TBAS Site 134), in recent years.

**Work Accomplished in the Three Infield Seasons**

TBAS team members surveyed a total of 290 sites in the 1999 and 2000 infield seasons. These sites are located within and adjacent to the random squares of the survey territory. This number includes 44 sites associated with the Pleistocene lakes in the Jurf ad-Darāwish region.

As a result of the infield work, TBAS team members were able to hook up geographically with the territories of both the WHS and the SGNAS. Relative to the WHS survey territory, the hook up was by means of the King’s Highway (Num 20.17; 21.22), which runs through at-Ṭafila and immediately to the east of Buşayra, the *Via Nova Traiana*, which runs through the central segment of the TBAS territory, and the Ḥajj route, the track of which

is in the eastern portion of the survey territory. With regards to the SGNAS territory, the geographical hook up was by means of a dirt track that goes in a northwesterly direction from the vicinity of Buşayra to Wādi ad-Dahal in the Northeast ‘Arabah. Moreover, there is a further geographical link between the territory of the TBAS and that of the SGNAS by the recently built road that goes from the plateau just to the south of at-Ṭafila along Wādi ‘Umruq to Ghawr Fifā (Waheeb 1993). Thus, as a result of the work that team members of the TBAS, WHS, and SGNAS accomplished, the entire area from Wādi al-Ḥasā in the north to just south of Buşayra in the south, from the Rift Valley on the west to the desert region around Jurf ad-Darāwish in the east can be considered for study purposes as one archaeological region.

TBAS team members transected six of 11 random squares in Zone 1; all 70 squares in Zone 2; all six



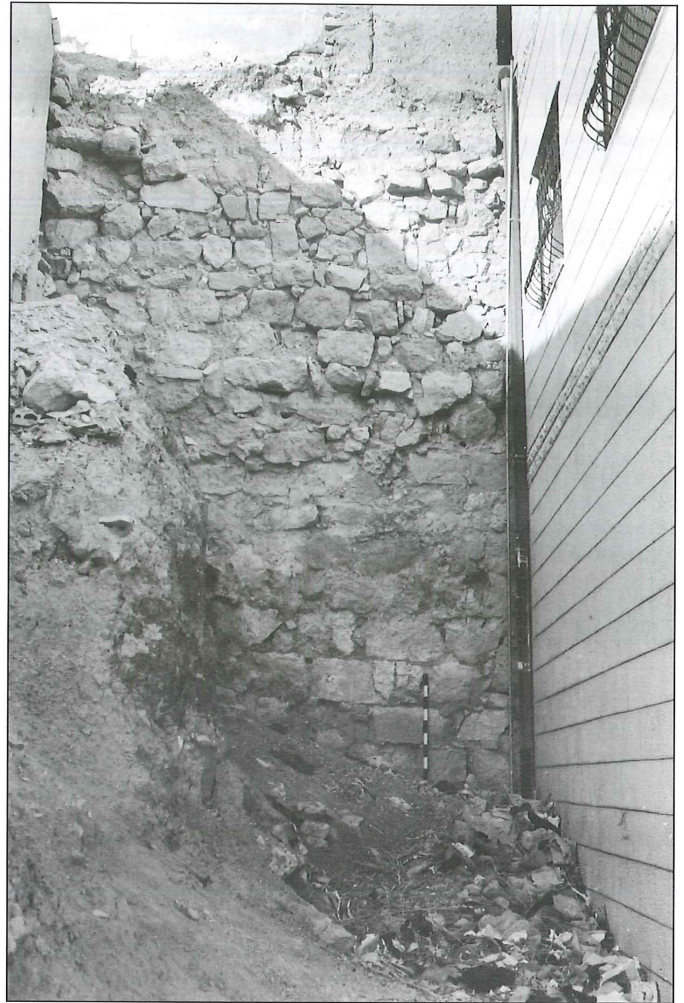
squares in Zone 3; and 29 of 33 squares in Zone Buṣayra. Five of the squares in Zone 1 and four of those in Zone Buṣayra were inaccessible to TBAS team members due to the roughness of the terrain.

The survey of an area of a 3-km radius around the Buṣayra Citadel (TBAS Site 135) as a “hinterlands” investigation resulted in the discovery of possible Paleolithic, Iron Age, Iron II, Early and Late Roman, Roman (Nabataean), Byzantine, Early, Middle and Late Islamic, and Modern materials.

Two sites of particular interest in Zone Buṣayra are Tall Buṣayra (TBAS Site 132) and a Greek inscription (TBAS Site 133). Tall Buṣayra is located 900m down the slope from the modern gate that gives access to the Buṣayra Citadel excavations. It appears to be a *tall* and is cut by roads on its west, south, and east sides. Several wall lines are clearly visible in these road cuts. One particular wall, uncovered during bulldozing associated with the construction of two modern, four-story buildings, still stands 6.25m above the present street level (FIG. 4). It is more than 1m thick. It runs in a north-south direction, extending radially from the Buṣayra Citadel, and is exposed for a distance of 25 meters. Periods represented by the sherds that TBAS team members collected in the vicinity of the road cuts are Early Iron II, Iron II, Roman, Nabataean, Byzantine, Early Islamic, Late Islamic, and Modern. If Tall Buṣayra and the Buṣayra Citadel are contemporaneous, then the town was a very large one during the Iron II period. With respect to the Byzantine period, one limestone block features a partial Greek inscription and an associated Christian cross, TBAS Site 133. The block is located in an arch of a roofless and presently abandoned Ottoman house on the east side of modern Buṣayra. The inscription is presently upside down and is clearly a reused stone from an ecclesiastical structure. It appears to be based on Psalm 121.8, “The Lord keep your going out and your coming in...” (T. Gagos, personal communication). The inscription is probably an indication that a church, mentioned by Glueck (1934: 78) and Saller and Bagatti (1949: 231), existed in Buṣayra during the Byzantine period.

TBAS team members “ground-proofed” 81 potential sites on 12 aerial photos. They judged 42 percent of these to be sites. An additional 14 percent of these potential sites have been lost, due mainly to development in the form of agricultural field clearance, residential and road construction, and reforestation. TBAS team members judged the remainder of these potential sites to be field clearance in the form of stone lines and stone piles, exposed bedrock, and animal pens and/or corrals.

The main objective of the 2001 infield season was to draw as many of the architectural sites that TBAS team members had surveyed during the previous two seasons of work. As a result of the season’s work, TBAS team mem-



4. 6.25m high wall at Tall Buṣayra, Site 132.

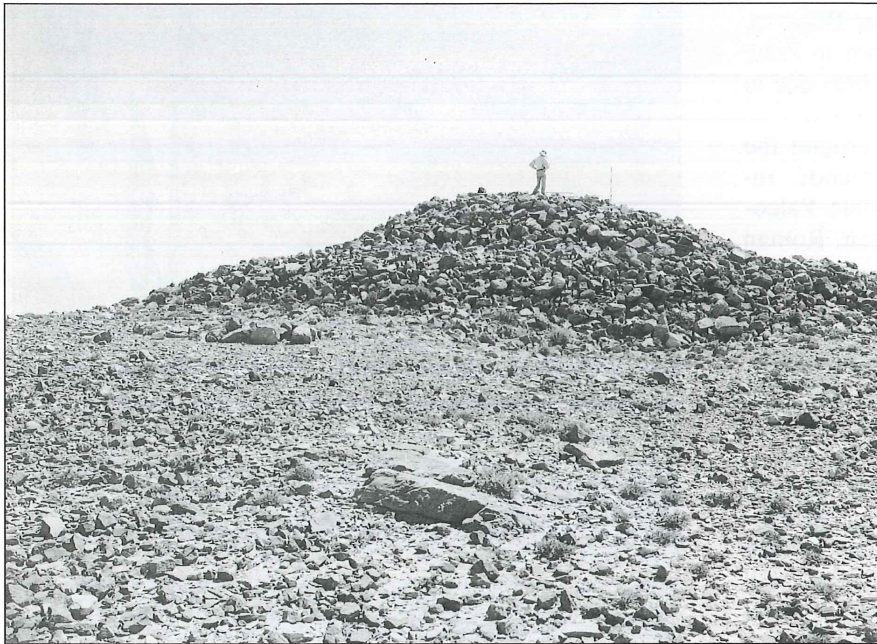
bers completed 42 drawings at 36 sites. Two drawings were done at six sites. In addition, team members did measurements at one site, namely, the Jurf ad-Darāwish *castellum* (TBAS Site 141), at which it was not possible to do a drawing due to erosion and silting.

#### Site Types:

TBAS team members classified the surveyed sites into a variety of types. These types are:

- 1) *Enclosures/seasonal camps with architecture*: Site 54; Site 63; Site 66; Site 68; Site 70; Sites 73-74; Sites 76-80; Sites 107-109; Site 128; Site 163; Site 171; Sites 184-185; Site 189; Sites 194-195; Site 207; Site 211; Site 213; Sites 216-220; Sites 222-225; Sites 228-237; Sites 240-242; Sites 245-247; Site 249; Site 261; Site 263; Site 269; Sites 276-284; Sites 286-288; and Site 290 (?);
- 2) *Watchtowers or probable watchtowers*: Site 2 ( Kh. Qaṣr ad-Dayr I); Site 61 (Rujm al-Musaykanah); Site





5. Site 260, Rujm al-Ḥamrā; general view, looking northeast.

- 130 (Kh. Umm ash-Sha‘īr/Kh. aṣ-Ṣulaybiyyāt); Site 140 (Qaṣr al-Bint); Site 173 (Kh. al-Frayj); Site 176 (Rujm ath-Thalithuwāt); Site 178; Site 182; Site 190 (Kh. al-Khunaysrah); Site 195 (?); Sites 198-199; Site 238 (?); Site 248 (?); Site 251 (Rujm al-Ḥāj); Site 258; Site 259 (Rujm al-Qirān); Site 260 (Rujm al-Ḥamrā) (FIG. 5); Site 268; Site 270; and Site 272 (Kh. Umm al-‘Azām);<sup>2</sup>
- 3) *Seasonal camps/production/processing centres* (mostly without architecture; generally the lithic sites associated with the Pleistocene lakes in the Jurf ad-Darāwīsh area): Sites 91-100; Site 102; Site 104; Site 110; Site 112; Sites 114-115; Site 208; Site 210; Site 212; Site 215; Sites 226-227; Sites 252-254; Sites 256-257; and Site 271;
- 4) *Milestone(s) and/or fragments of milestones*: Site 191; Site 193 (with inscription); Site 197 (with inscription); Sites 200-201; Sites 203-204; Site 206; and Site 250 (associated with the Ḥajj route rather than with the *Via Nova Traiana*) (FIG. 6);
- 5) *Forts or possible forts*: Site 26 (Qaṣr Qarqūr); Site 36 (Ramsis I); Site 123 (Rujm Rās al-Ḥalā); Site 141 (the Jurf ad-Darāwīsh *castellum*); Site 164 (Kh. aṭ-Ṭawlāniyah); Site 177 (Kh. Mughāmis); and Site 273 (Kh. ad-Dabbah) (?);
- 6) *Water-catchment facilities*: Site 75 (?); Site 148 (?); Site 221; Site 239; Site 243; and Site 289;
- 7) *Major north-south highways*: The King’s Highway (Num 20.17; 21.22);<sup>3</sup> Site 180 (*Via Nova Traiana*); and Site 240 (the Ḥajj Route);
- 8) *Wall line(s)*: Site 53; Site 85; Site 153; Site 156; Site 186 (Khaṭṭ Shabīb);<sup>4</sup> Site 196; Site 205; and Site 214;
- 9) *Quarries*: Site 83 (Kh. al-‘Ays/‘Īṣ, Part 3); Site 90;<sup>5</sup> Site 118; Site 162; and Site 179;
- 10) *Farms and/or villages*: Site 1 (Kh. al-Ḥārith); Site 3 (Kh. Qaṣr ad-Dayr II); Site 4 (Kh. al-Fraydis/Kh. as-Sa‘wah); Site 7 (Kh. Abil); Site 8 (Kh. Umm ash-Sha‘īr); Site 9 (Kh. ‘Alāqah); Site 10 (Kh. al-Janīn); Site 13 (Kh. ‘Arafah); Site 19 (Kh. al-Qurr); Site 21; Site 24 (Kh. al-Qarqūr); Site 25; Site 28; Site 32 (Ma‘an); Site 37 (?) (Ramsis II [possible watchtower]); Site 39 (Umm aṭ-Ṭawābin); Site 40 (Kh. al-Matah); Site 43 (Kh. al-Brayj); Site 44 (Kh. al-Mabrak); Site 47; Site 48 (‘Ayn al-Qrayān); Site 49 (Kh. al-Faṭāt); Site 50 (Kh. Umm Za‘rūrah); Site 51 (Kh. az-Zanātiyyah); Site 71 (Kh. al-Kūlā); Site 72 (Kh. al-Qa‘īr); Site 82 (Kh. al-‘Ays/‘Īṣ, Part 2); Site 84 (Kh. Abu Shawk); Site 86 (Kh. Khaniq al-Lawz/Kh. Tal‘at Ḥusayn); Site 87 (Kh. Ḥid); Site 116 (Kh. Ḥasan al-Ḥusayn); Site 117 (Kh. Zūbrah); Site 119; Site 126

2 Site 259 and Site 260 are immediately to the south and north respectively of the TBAS territory. They are included in the TBAS list of sites because of their prominence.

3 TBAS team members did not assign the King’s Highway, which generally follows the modern asphalt road in a north-to-south direction through the survey territory, a site number.

4 Site 186 is a particularly interesting wall line that requires further

investigation. It crosses through the survey territory in a north-to-south direction to the east of the *Via Nova Traiana*. It could have been a border demarcation line of some sort. On this line, see Kirkbride (1948) and Abujaber (1995: 740).

5 Site 90 is to the south of the TBAS territory. See MacDonald *et al.* 2000: 515, Note 6 for further information on this quarry.





6. Site 250, Milestone fragment along the Ḥajj Route in Jurf ad-Darāwīsh area.

- (Kh. Naqad); Site 131 (?); Site 132 (Tall Buşayra); Site 137 (Kh. Umm al-Malāfīs); Site 138 (Kh. ad-Daqla); Site 142 (Kh. Ḥarīr); Site 143 (Kh. Umm al-Ḥarmal); Site 146 (Kh. as-Sahbāniyah); Site 147 (Kh. Masalla); Site 149 (Kh. al-‘Amyā’); Site 150; Site 158; Site 159 (Kh. Ibn Hadāyah); Site 160 (Kh. ash-Sharī‘ah); Site 165 (Kh. Tal‘at as-Sa‘īr/Kh. az-Znanin); Site 166 (Kh. al-Frayj); Site 167 (Kh. al-‘Adawīn); Site 168 (Kh. an-Naşrāniyah); Site 169 (Kh. aṣ-Şīr); Site 170 (‘Ābūr); and Site 244;
- 11) *Church/chapel and/or possible monastery*: Site 5 (Kh. ‘Ayn al-Bayḏā); Site 12 (?); Site 15 (Kh. ad-Dayr) (?); Site 59 (?); and Site 157 (Kh. Umm Sarāb) (?);
- 12) *Major Citadels*: Site 134 (as-Sala‘/Sela); and Site 135 (Buşayra);
- 13) *Rectilinear structure(s) (function undetermined)*: Site 6 (Kh. al-Ḥanānah); Site 65; Site 69; Site 81 (Kh. al-‘Ays/‘Īṣ, Part 1); Site 101; Site 111; Site 120 (Kh. al-Khadra); Site 127; Site 129 (with associated caves); Site 198; Site 202; Site 274; and Site 285;
- 14) *Caravanserai*: Site 62 (Qaşr Karayim bin ‘Alī); Site 183 (Qaşr al-Bāshā); and Site 192 (Kh. at-Tuwānah);
- 15) *Tombs/Cemetery*: Sites 55-57; Site 58 (?); Site 67; Site 103; Site 106; Site 113; Site 121; Site 136 (“Tomb of the Venerable Companion of the Prophet Muḥammad”); Site 145; Site 161; Site 172 (FIG. 7); Site 174; Sites 187-188; Site 209; Site 255; and Site 275;
- 16) *Lithic scatter*: Site 14; Sites 17-18; Site 20; Site 41; Site 45 (and an associated milling stone); Site 60; Site 155; Site 208; and Sites 264-267;
- 17) *Sherd scatter*: Site 33; Site 35; Site 38; Site 105 (pot-

bust); Site 154; and Site 175 (with an associated cistern);

- 18) *Lithic and sherd scatters*: Site 11; Site 88 (Kh. az-Zurayqāt I); Site 89 (Kh. az-Zurayqāt II); Site 139; Site 144; and Site 262;
- 19) *Cave(s)*: Site 22; Site 23 (with spring); Site 27 (ad-Dabbah); Site 29; Site 64; Site 122 (Mughārat Malāfīs); Site 124 (Ṭūr Abī al-Ḥamām); Site 125; and Site 152;
- 20) *Inscriptions*: Site 30; Site 133; and Site 181 (petroglyphs);
- 21) *Terraces*: Site 16; Site 31; Site 34; Site 42; Site 46; and Site 52; and
- 22) *Castle*: Site 151 (Qal‘at at-Ṭafila with a Latin inscription on a stone in the north interior wall).

The major architectural sites, for example, farms and/or villages, of the TBAS are, for the most part, located on the plateau, that is, in Zone 2. Only a dozen or so of these sites were “known” to the scholarly community previous to the project’s work. The ones previously “known” are located along the main at-Ṭafila-Buşayra road, that is, the King’s Highway, and the Roman road (*Via Nova Traiana*).

### Time-Stratigraphic Units Represented in the Survey Territory

The time-stratigraphic units most commonly represented in the TBAS territory are the Middle Paleolithic, Epipaleolithic, Neolithic-Chalcolithic, Iron II, Early Roman (Nabataean), Roman, Byzantine, and all Islamic periods. Units poorly represented or not represented at all include the Early Bronze, Middle Bronze, Late Bronze, Early Iron I, Persian, and Hellenistic.

### Acknowledgments

The Department of Antiquities of Jordan provided permission to carry out the infield work. Thus, I wish to thank Dr. Fawwaz Al-Khraysheh, Director-General of the Department, as well as his staff, both in ‘Ammān and at-Ṭafila, for their support of all aspects of the project.

The American Schools of Oriental Research, through its Committee on Archaeological Policy, affiliated the project.

While in Jordan, the project used the American Center of Oriental Research (ACOR) as its basis of operation. Drs. Pierre and Patricia Bikai along with all the other staff members of ACOR facilitated the in-country work of the project.

The Social Sciences and Humanities Research Council of Canada provided the major funding for the project. The Joukowsky Family Foundation and the University Council for Research of St. Francis Xavier University provided additional funding.

Of course, the project would not have been possible without the help of all TBAS team members. They are





7. Site 172, Robbed, rock-cut tombs.

listed in the Note 1. To them, I express my sincerest gratitude.

Additional information on the project is available at <http://www.stfx.ca/people/bmacdona/tbasweb/welcome.htm>

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