PRELIMINARY REPORT OF THE 2003 FIELD SEASON AT YA'MŪN BY THE JOINT YARMOUK UNIVERSITY/ UNIVERSITY OF ARKANSAS PROJECT

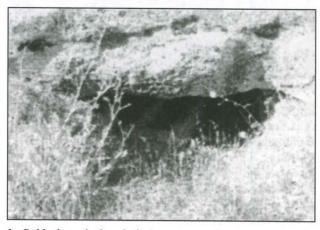
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The Universities of Arkansas (USA) and Yarmouk (Jordan) conducted their 2003 field season at the site of Ya'mūn (عدمون) between 24 June and 17 July. The project was co-directed by Prof. Jerome C. Rose, Anthropology Department, University of Arkansas and Prof. Mahmoud Y. el-Najjar of the Anthropology Department, Institute of Archaeology and Anthropology, Yarmouk University. The staff included Drs. Dolores L. Burke, Nizar Turshan and Mr. Muwafaq Batainyeh with Mr. Mohammad Dheeb al-Bashabsheh representing the Department of Antiquities. Dr. Abdullah Shorman, Abdel Nasser Hindawi, Ahmed Shorman, and Tammam Khasawneh provided further assistance.

Although joint excavations had taken place during the previous four seasons, the full extent of the Ya'mun site was still unknown and all of the surface features had not been located and their positions marked on the topographic map of the site. This site map covers an area of approximately 1,200,000 square meters and was divided into sectors for systematic examination. Each sector was walked and when a feature such as a cave or robbed tomb was encountered its position was noted using a "laser total station" positioned on the central tell. A total of 398 features were encountered and recorded. A total of 110 robbed or possible tombs were discovered that had not been recorded during previous excavations and surveys. A further 144 caves were marked for detailed examination and testing for use as tombs or ancient storage facilities. There are 60 small quarry sites scattered throughout the area and many more were probably obscured by soil and vegetation. Evidence of extensive agriculture activity in the immediate area of the tell and its church and acropolis (occupied from the Late Bronze Age through Islamic periods) is provided by the 54 carved cisterns for water storage, 4 wine presses, 24 cup marks, and 2 olive presses. It became immediately clear that the features continued beyond the existing topographic map and thus two weeks were devoted to extending the present map to the ridge tops visible from the tell. These data will be plotted during the coming months and a new expanded map produced with all of the excavated and surface features marked.

The tombs ranged from virtually cleared robbed tombs where sarcophagi and other features can be easily seen (Fig. 1) to subtle surface features that strongly suggest the existence of a tomb below. Natural caves (Fig. 2) are abundant and previous excavations have shown that such caves had been used as tombs or produced evidence of other ancient uses. The most important results are the extensive evidence of agricultural activity such as the wine presses (Fig. 3) and the olive presses (Fig. 4). The presses clearly deserve immediate attention and will be scheduled for excavation and detailed recording during the next season.

Visual inspections of the local lithology were conducted at the site during the survey and the information was interpreted and prepared as a geological report by Ahmad Hassan al-Shorman, Archaeology Department, Institute of Archaeology and Anthropology with assistance from Dr. Abdullah Shorman, Anthropology Department, In-



 Robbed tomb found during survey showing empty sarcophagus within.



2. One of the 144 caves present at Ya'mūn.



3. The smallest of the four wine presses at the site.



4 One of two olive presses found visible on the surface of the site

stitute of Archaeology and Anthropology. The results were plotted on paper contour site map for eventual production of a local geological map of Ya'mūn. This extensive geological survey will serve as the primary data, along with the surface and excavated archaeological features for predictive modeling using Geographic Information System (GIS) technology.

The 'Ajlūn (عجلون) Dome structure is the major regional structure of the Ya'mūn area, which plunges to the north toward the Irbid plains causing a gentle regional dip to the NNE across most of the area. The area is dominated by a major east-west fault system with minor northeast-southeast faults.

There are three geological formations at Ya'mūn. The Wādī as-Sīr (وادى السير) Formation is the upper one of the many formations in 'Ajlūn Group (e.g.: Na'ūr, al-Ḥummar (الحمة) and al-Fuḥayṣ (الفحيص). It is the oldest of the Ya'mūn formations and is divided into three main parts. The lower part is not exposed at Ya'mūn but the middle portion consisting of marl limestone and the upper section consisting of hard white-gray, mainly, Micritic limestone are both found. The Wādī Umm al-Ghudrān (أم الفدران) Formation is the oldest in al-Balqā' (البلقاء) Group that lays above 'Ajlūn Group separated by an unconformity surface. The lower portion of the Wādī Umm al-Ghudrān Formation consists of a yellow-white gray massive chalk while the upper part consists of a thin to medium bedded fossiliferous to coquinal yellow-gray limestone with alternating beds of marl and soft marl limestone. The 'Amman Silicified Limestone Formation is the second of al-Balqa Group and lays above the Wādī Umm al-Ghudrān. It is characterized by the presences of chert beds alternating with silicified limestone and phosphate chert. A phosphate bed near the top might rarely be found.

The local lithology sequences of the southern and western portions of the Ya'mūn area consist of alternating layers of marl limestone (medium hardness) ranging from 0.5-2.5m in thickness and Micritic limestone (very hard, but subject to concoidal fractures) ranging from 0.3-3m in thickness. This is the oldest sequence at Ya'mūn and begins to appear at the wadi floors and extends upward to approximately the last quarter of the hills. Above this sequence a hard limestone of 0.5-1m in thickness is found along with a clayey chalk layer of about 1-2m in thickness. The southern, eastern and western hill tops display a layer of marl limestone (0.2-1m), thin chert beds (0.1-0.6m), and a silicified limestone layer (0.5-1.5m).

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