

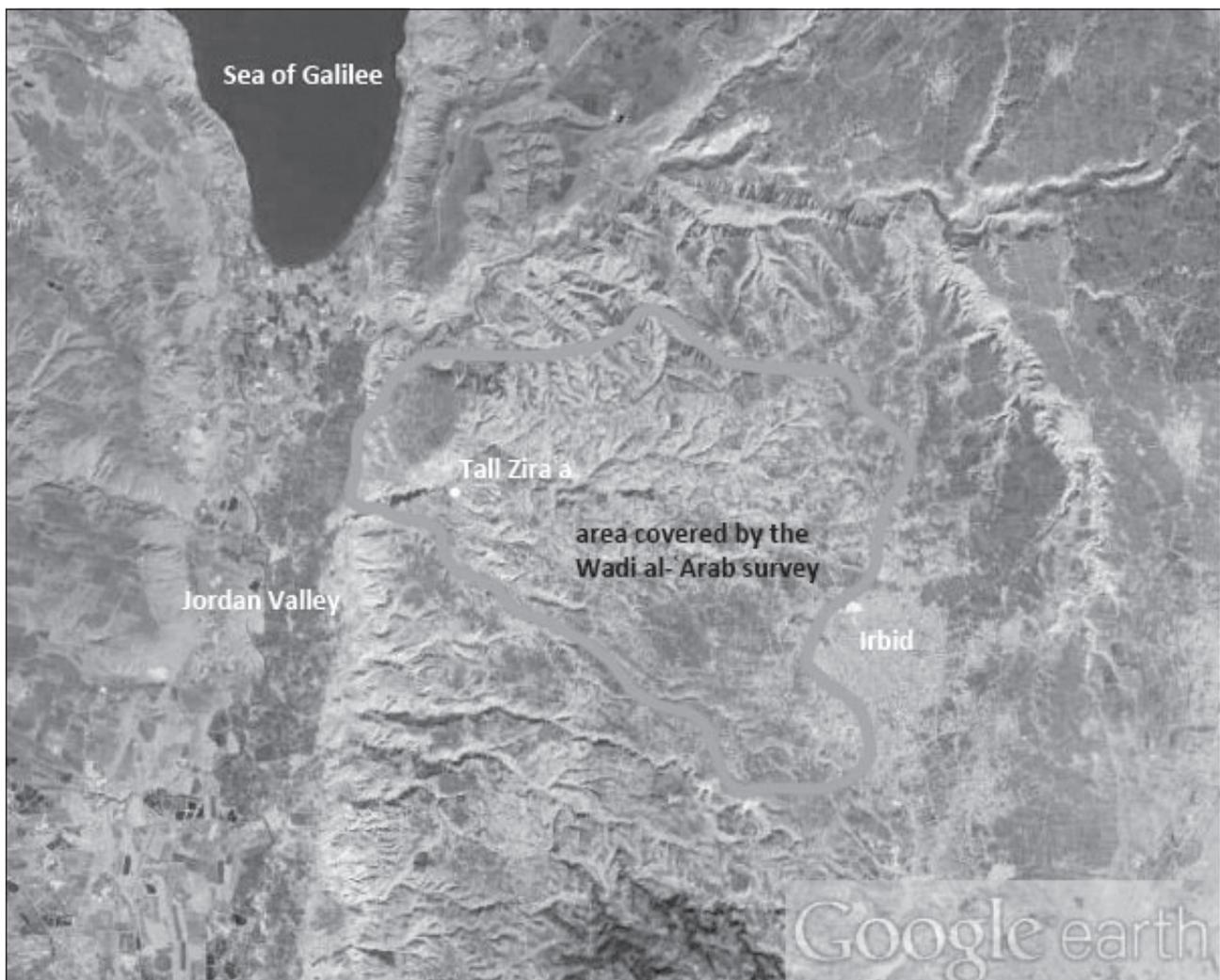
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## **Survey in Wādī al-‘Arab 2009 - 2011**

During the summers of 2009 to 2011, a survey in Wādī al-‘Arab and its environs was carried out by the Biblical Archaeological Institute,

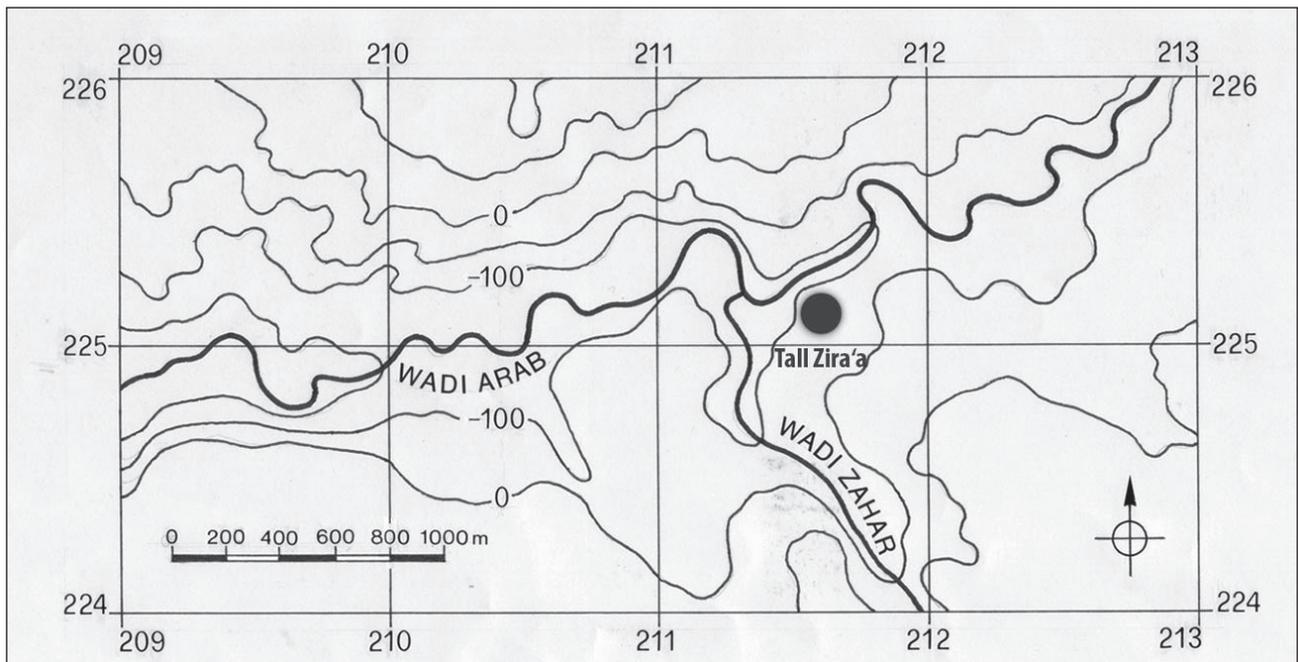
Wuppertal and the German Protestant Institute for Archaeology (FIG. 1). This survey is an integral part of the Gadara Regional Project and



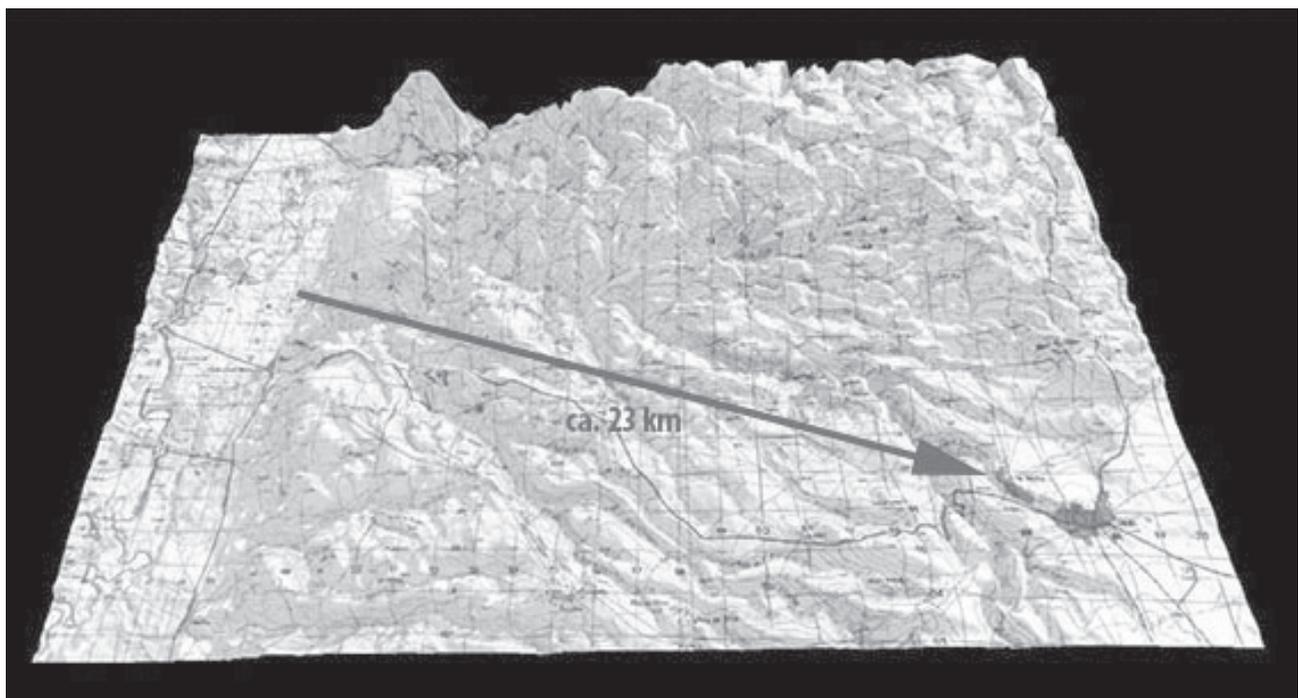
1. Area covered by the Wādī al-‘Arab survey.

was planned as a hinterland survey for the Tall Zar‘ā excavations. The aim of the survey is to gain a thorough understanding of the landscape in which Tall Zar‘ā is the most prominent archaeological site (FIG. 2). Questions of settlement pattern, distribution, relationships and relative importance through time lie at the heart of such an exploration. Furthermore, Wādī

al-‘Arab is one of the easier ascents from the Jordan valley to the Irbid - Ramthā basin and thus lies on trade routes from the Mediterranean coast to Damascus, Mesopotamia and Amman (FIG. 3). Questions about the actual locations of the trade routes crossing this area and their shifting importance over time arise. The survey has focused on evidence that could help answer



2. Map showing location of Tall Zar‘ā at the confluence of Wādī al-‘Arab and Wādī Zahar.



3. Ascent from the Jordan valley to the Irbid – Ramthā basin.

these questions. Clearly, information on sites in the *wadi* and its environs should be as detailed and up to date as possible.

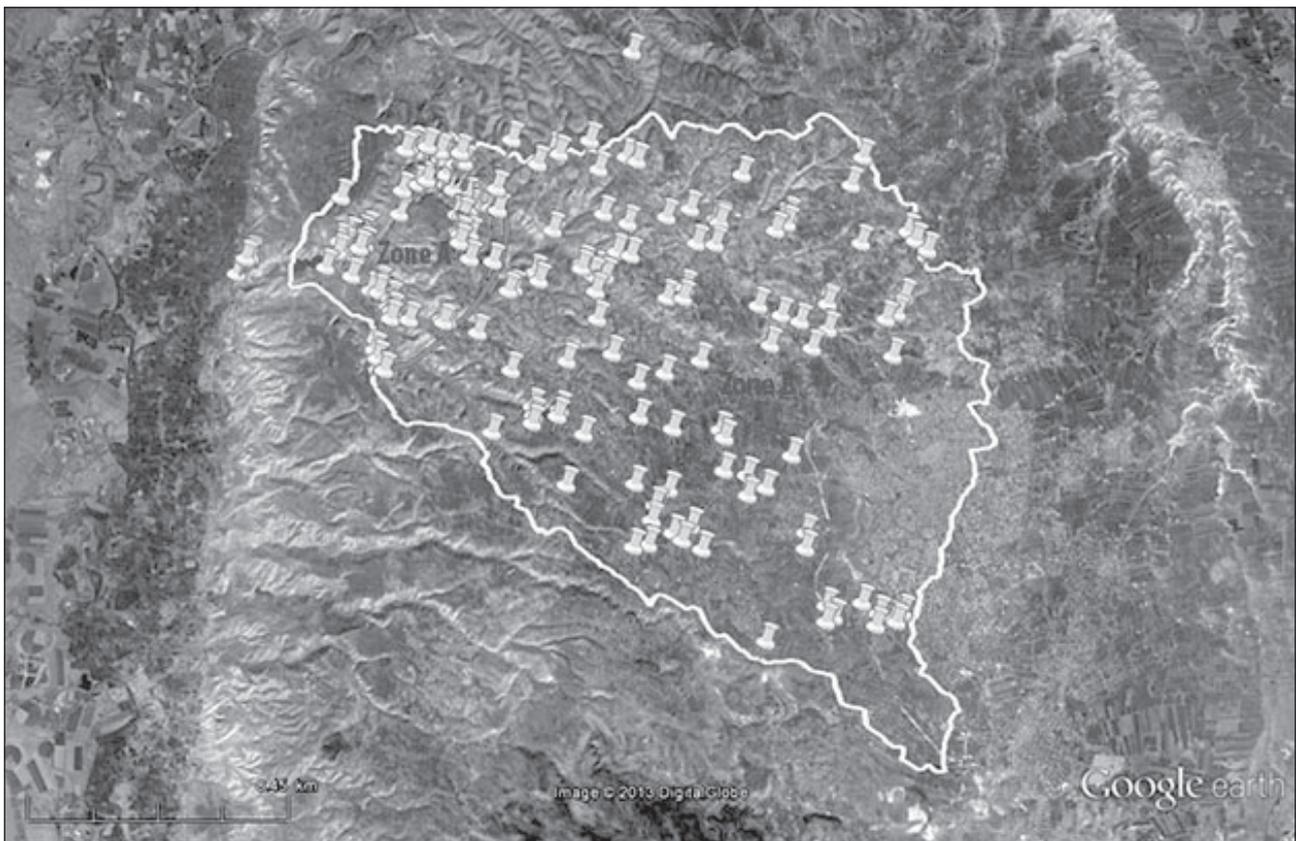
Wādī al-‘Arab has been surveyed several times previously (Gottlieb Schumacher 1889; Nelson Glueck 1942; Siegfried Mittmann 1963-66; J. W. Hanbury-Tenison 1983). Whilst all have yielded valuable information, they do not give the completeness of coverage and level of detail needed for the Gadara Regional Project. The two earlier surveys had much broader foci and could therefore only cover major sites in the area of interest. J. W. Hanbury-Tenison’s survey is restricted to two areas and does not cover all of Wādī al-‘Arab. Furthermore, as it is now at least one generation old, a fresh look at the data seems appropriate considering how much more is known about the region as a result of the Gadara Regional Project.

Bearing in mind the results of previous surveys and the aim of carrying out a hinterland survey, a two-fold approach was taken: (1) revisiting known sites in order to gain additional

information; (2) filling in the gaps by surveying areas that had not been surveyed before. Over three seasons, the hinterland of Tall Zar‘ā was completely examined, with the area of investigation being divided into two zones: Zone A and Zone B. Zone A is the area in the vicinity of Tall Zar‘ā, with Zone B extending up to Irbid (FIG. 4). We tried to cover Zone A in its entirety, whereas in Zone B we concentrated on known or larger sites.

The exact location of all sites was recorded by GPS, pottery was collected and descriptions of current state were refreshed, with detail and overview pictures being taken (FIG. 5). All information was entered into a database (FIG. 6). With the knowledge gained from previous surveys, we are now able to map 201 sites and features (FIG. 7).

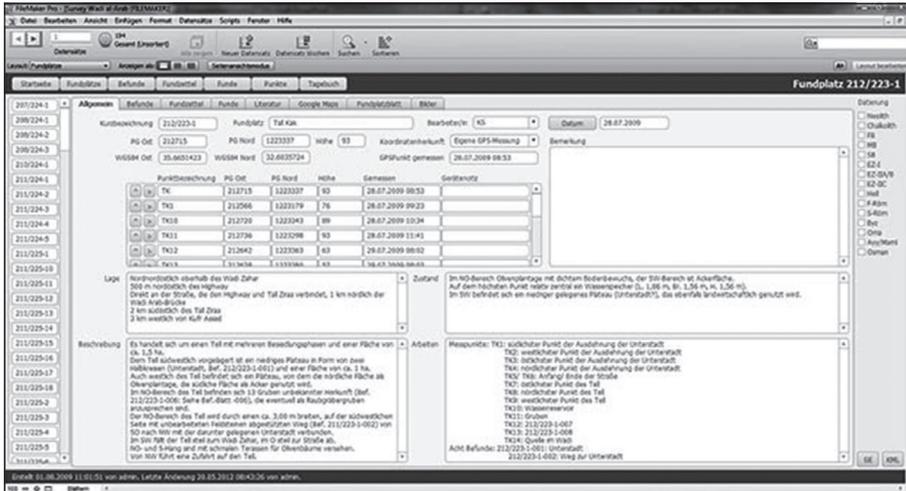
In the first season 78 sites were recorded; 30 were new or had not been published before. Over 80 % of the sites relate to the classical era. The other sites were inhabited in the Bronze Age, Iron Age or different Islamic periods. Lithic sites were



4. Area of investigation with different zones.



5. Measuring one of the pen-stock mills.



6. Database.



7. Sarcophagus (site 228/213-5).

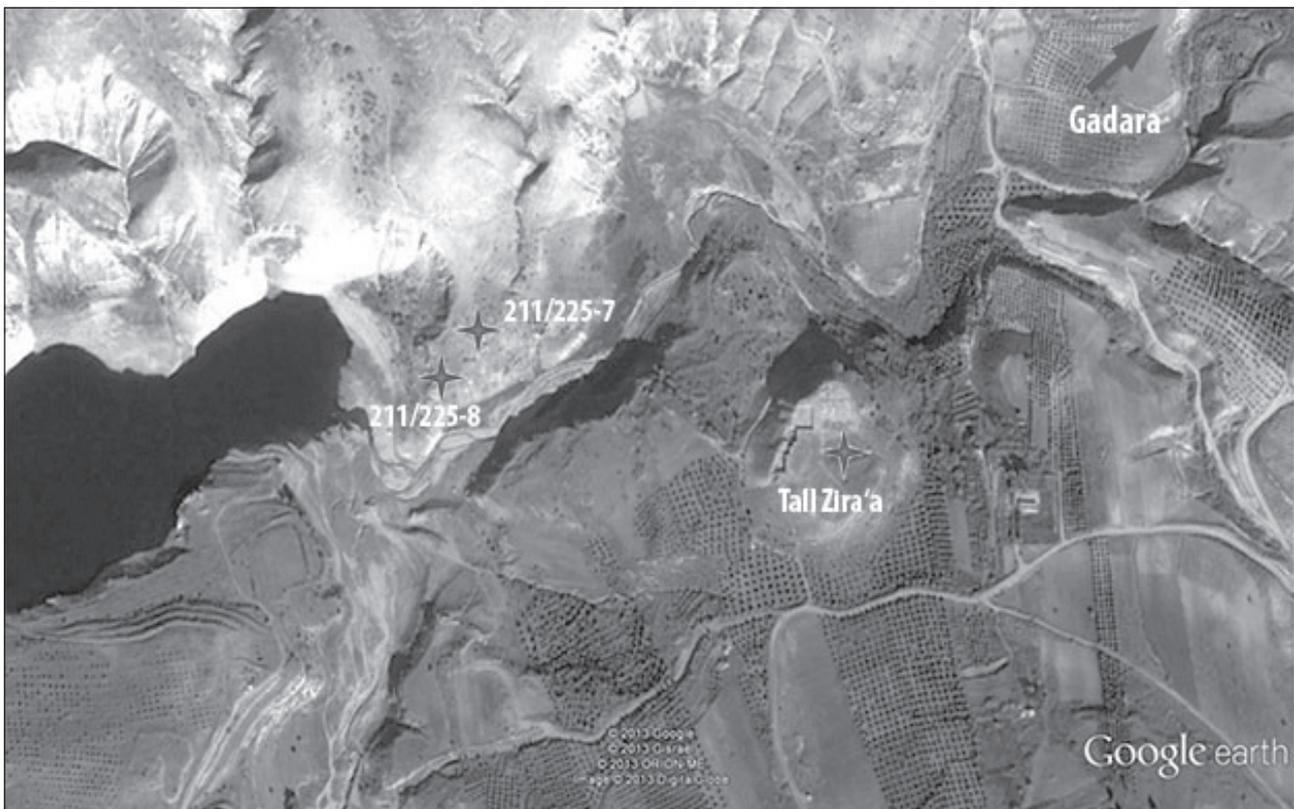
not discovered. The substantial sites of Tall Kak and Tall Kinise were revisited. The area around the Wādī al-‘Arab dam was surveyed, which had been partially covered by Kerestes in 1978 and Hanbury-Tenison in 1983. Furthermore, the slopes of Wādī al-‘Arab from Tall Zar‘ā up to the area of Seidur and Doqara were surveyed. The majority of this area had not been surveyed in detail before. While Seidur and Doqara themselves are mentioned by Mittmann, the surrounding area revealed many sites which shed new light on agricultural subsistence at the settlements.

The northern slopes of the *wadi* directly upstream from Tall Zar‘ā are characterised by a concentration of water sources. Many of the sites found there relate to them. This may shed additional light on water management in the region during the Roman period (FIG. 8). One smaller site directly across the *wadi* from Tall Zar‘ā deserves special mention. It was first published by Kerestes in 1978 (site 2 in Wādī al-‘Arab; 211/225-8) and identified as being of Middle Bronze Age date (FIG. 9). Its location gives this site a direct relationship with Tall

Zar‘ā. Together they control a narrow passage in the *wadi*; there is direct line of sight between this site and the *tall*. Just 50 m up the slope of the spur, another previously unknown / unpublished site was recorded, with architectural remains of the Roman period (211/225-7). This site does not only overlook the lower *wadi*, as does the nearby older site, but also has direct line of sight to Gadara which is not the case further downslope (FIG. 10). This gives a hint about the shift of gravity from Tall Zar‘ā to Gadara during the classical era (FIGS. 8 and 11).

Upstream from Tall Zar‘ā in Wādī al-‘Arab, five penstock mills were recorded along with two dams. Hanbury-Tenison only mentions three mills. All of them can be dated to the Ottoman period.

During the 2010 season, 57 sites were recorded. During the first season in 2009, the lower part of Wādī al-‘Arab from North Shuna up to Doqara was surveyed; in 2010 the survey covered the area from Doqara up to the vicinity of Irbid. The nature of the landscape changes when approaching the upper part of Wādī al-



8. Location of sites 211/225-7 and 211/225-8 in relation to Tall Zar‘ā and Gadara.



9. Site 211/225-8.



10. Site 211/225-7.



11. Location of the sites seen from halfway to Gadara.

‘Arab. The *wadi* is more deeply incised, with settlements situated mainly on the plateau edges high above the *wadi* (FIG. 12). The majority of ancient settlements in this area had been identified previously by Glueck and Mittmann.

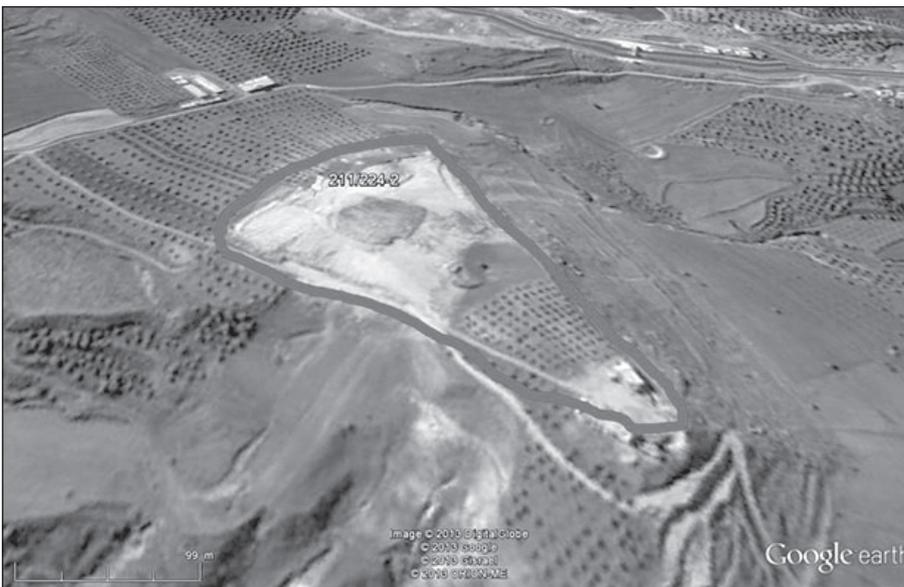
One important result of revisiting previously published sites during our survey of Wādī al-‘Arab relates to the severe destruction that has occurred at many sites over the past few decades. The breathtaking increase in the rate of destruction is alarming. Only recently a large *tall* south of Tall Zar‘ā with Roman, Byzantine and Islamic occupation (no. 26 in the Hanbury-Tenison survey; 211/224-2) has been completely destroyed by bulldozing (FIG. 13).

We could see ancient remains - some of the stones still *in situ*, but most of them shoved away - extending over an area of *ca.* 130 × 90 m (possibly more before destruction in modern times). The bulldozer section revealed at least two layers of Roman - Byzantine settlement, separated by layers of ash (FIG. 14).

Almost all of the modern villages turned out to date back to at least the Roman and / or Byzantine periods, and some of them to the Iron or Bronze Ages. Only a small number of the ancient settlements are not covered by and partially destroyed by modern settlements. This includes most of the Islamic sites in Wādī al-‘Arab. It is especially sad to note that none



12. Site 214/227-3.



13. Site 211/224-2.



14. Two layers of Roman - Byzantine occupation, separated by layers of ash.

of the old mosques in the *wadi* area - some of them dating back to the mediaeval period - are still in existence. To the best of our knowledge, the last old mosque in the area can be found at Harga village, and even this one is in very bad condition (site 233/229-1; FIG. 15).

Several smaller sites have been destroyed by agricultural activity, especially olive tree cultivation that leaves sites in an unrecognizable state. This has led the Gadara Regional Project team to the firm conclusion that this survey is not only a necessary complement to excavation, but also a means of saving information relating to the history of Wādī al-‘Arab, most of which will be lost in the near future.

Despite the continuing demolition of ancient monuments, we managed to recover representative samples of pottery from all sites, from which a concise overview of the history of Wādī al-‘Arab can be derived.

Apart from the serious destruction noted above, another problem emerged clearly. Most of the unknown or at least unpublished sites showed traces of recent unauthorised excavation / digging, concentrating mainly on tombs (using metal detectors), during which most of the finds were removed. Two examples are given below:

One site, Khirbet Sris (M 059; 228/221-1), was first described by Mittmann. When we



15. Mosque in Harga village (site 233/229-1).

visited the 1½ ha site, the vegetation had been burnt down (FIG. 16). We found pottery, *tesserae*, a cistern and a robber trench (in which three layers of ashlar masonry were visible). The pottery dated to the Roman - Byzantine - Islamic (Umayyad) periods. Another site, previously unpublished, is located south-west of Wādī al-‘Arab, north of Fu‘ara, (220/224-1). An area of approximately 2 ha (250 × 80 m) was covered with pottery, *tesserae* and some fragments of glass. Additionally graves, cisterns, a quarry and some natural caves were located (FIG. 17). Most of the graves were only visible because of recent robber trenches and nearly all were shaft tombs. Ashlar blocks could be seen in one robber trench. The pottery dates to the Roman - Byzantine - Islamic periods and suggests at least two phases of occupation.

### Summary

Undertaking a survey in a previously surveyed area has been, in retrospect, a surprisingly rewarding task. It is less about pioneering activity, but more about maintaining the record, filling in the gaps, recording the losses and trying to clear up the picture using the most up-to-date information and techniques. Therefore, we prefer to view this survey not only as standalone piece of activity, but also as part of an ongoing, long-term survey that builds on the



16. Robber trench at site 228/221-1 (with three layers of ashlar masonry visible).

pioneering work of researchers such as Nelson Glueck and Siegfried Mittmann. The work has to continue with refined knowledge and better techniques, carried out by ourselves and hopefully many others.



17. Entrance to a grave at site 220/224-1.

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