

Tall Zirā'a

THE GADARA REGION PROJECT (2001-2011)

Dieter Vieweger | Jutta Häser (eds.)

1 Introduction

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German Protestant Institute of Archaeology
(GPIA)



Biblical Archaeological Institute Wuppertal
(BAI)



Tall Zirā'a

The Gadara Region Project (2001-2011)

Final Report

Volume 1

Introduction

Edited by Dieter Vieweger and Jutta Häser

With contributions by

David Adah-Bajewitz, Dietmar Biedermann, Götz Bongartz,
Gilles Bülow, Johannes Große Frericks, Jutta Häser, Stefanie Hoss,
Daniel Keller, Frauke Kenkel, Patrick Leiverkus, Linda Olsvik-
Whittaker, Knut Rassmann, Armin Rauen, Samantha Reiter,
Katja Soennecken and Dieter Vieweger



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LIST OF ABBREVIATIONS

Abbreviated Journals and Series

AA	Archäologischer Anzeiger	LAA	Late Antiquity Archaeology
AAJ	Annual of the Department of Antiquities of Jordan	MEFRA	Mélanges de l'École française de Rome. Antiquité
AASOR	Annual of the American Society of Oriental Research	MKT	Menschen – Kulturen – Traditionen
ADPV	Abhandlungen des Deutschen Palästina-Vereins	NEA	Near Eastern Archaeology
AJA	American Journal of Archaeology	NEAEHL	The New Encyclopedia of Archaeological Excavations in the Holy Land
AW	Antike Welt	Newsletter PotTech	Newsletter. Department of Pottery Technology. University Leiden
AnSt	Anatolian Studies	OrA	Orient Archäologie
BAH	Bibliothèque archéologique et historique	OccOr	Occident und Orient
BaF	Baghdader Forschungen	PEF	Palestine Exploration Fund
BarIntSer	British Archaeological Reports. International Series	PEFA	Palestine Exploration Fund Annual
BASOR	Bulletin of the American Schools of Oriental Research	PEQ	Palestine Exploration Quarterly
Berytus	Berytus. Archaeological Studies	QDAP	Quarterly of the Department of Antiquities of Palestine
BibAr	The Biblical Archaeologist	RB	Revue Biblique
BSOAS	Bulletin of the School of Oriental and African Studies (London)	RDAC	Report of the Department of Antiquities, Cyprus
DaF	Damaszener Forschungen	SaalburgJb	Saalburg-Jahrbuch. Bericht des Saalburg-Museums
DaM	Damaszener Mitteilungen	SHAJ	Studies in the History and Archaeology of Jordan
GrRomByzSt	Greek, Roman and Byzantine Studies	SyrMesopSt	Syro-Mesopotamian Studies
Eretz-Israel	Eretz-Israel. Archaeological, Historical and Geographical Studies	SIMA	Studies in Mediterranean Archaeology
HdArch	Handbuch der Archäologie	SMEA	Studi micenei ed egeo-anatolici
IEJ	Israel Exploration Journal	StBiFranc	Studium biblicum Franciscanum. Liber Annuus
IES	Israel Exploration Society	TAVO	Tübinger Atlas des Vorderen Orients
JASc	Journal of Archaeological Science	TelAvivJA	Tel Aviv. Journal of the Institute of Archaeology of Tel Aviv University
JEA	The Journal of Egyptian Archaeology	ZDPV	Zeitschrift des Deutschen Palästina-Vereins
JFieldA	Journal of Field Archaeology	ZOrA	Zeitschrift für Orientarchäologie
JMedA	Journal of Mediterranean Archaeology		
LA	Liber Annuus		

General Abbreviations

Abb.	Abbasid	GPS	Global Position System
approx.	approximately	Hell.	Hellenistic
App(s).	Appendix	IA	Iron Age
BAI	Biblical Archaeological Institute Wuppertal	ICP	Inductively Coupled Plasma
Byz.	Byzantine	i.e.	id est
c.	circa	INAA	Instrumental Neutron Activation Analysis
CAD	Computer Aided Design	Isl.	Islamic
CCA	Canonical Correspondence Analysis	LB	Late Bronze Age
cf.	confer	L Isl	Late Islamic
Chap(s).	Chapter(s)	Maml.	Mamluk
CIE	Commission Internationale de l'Éclairage/International Lighting Commission	max.	maximum
CIELAB	Commission Internationale de L'Éclairage, International Lighting Commission	MB	Middle Bronze Age
Diss.	Dissertation	min.	minimum
DCA	Detroned Correspondence Analysis	n.	note
DGPS	Differential Global Positioning System	no(s).	number(s)
DoA	Department of Antiquities (Jordan)	Pl(s)	plate(s)
EB	Early Bronze Age	QGIS	Quantum Geographic Information System
ed(s)	editor(s)	RFA	Röntgenfluoreszenzanalyse
e.g.	for example	Rom.	Roman
E Isl	Early Islamic	TZ	Tall Zirā'a
etc.	et cetera	Um	Umayyad
Fig(s)	figure(s)	undet.	undetermined
GIS	Geographic Information System	VBA	Visual Basic Applications
GPIA	German Protestant Institute of Archaeology	XRD	X-Ray Diffraction
GPR	Ground Penetrating Radar	XRF	X-Ray Fluorescence

Legend for the Abbreviations used in the Catalogues of Chap. II (Pottery, Glass, Stone Material) and in the figure captions

D	Diameter	W	Width
L	Length	Th	Thickness
H	Height	g	Gram

PREFACE

by Dieter Vieweger/Jutta Häser



Fig. 0.1 Tall Zirā'a. View from west to east. Photograph taken in 2011 (Source: APAAMEE, David Kennedy).

When the German engineer G. Schumacher explored Transjordan in 1885, Tall Zirā'a was among his discoveries¹. He was the first European since the time of the Crusaders to enter the region. However, after thousands of years of prosperity, the valley had changed dramatically during the Ottoman period. The bedouins told Schumacher that the wādī had declined to become a “popular shelter for all sorts of refugees and criminal scum”.

Except for a few sugar mills, operated by water power, there were only a few small hamlets. A water flow of about 0.75 m³ per second flowed through the Wādī al-‘Arab in June 1885, and the Wādī az-Zaḥar added the same amount of spring water. C. Steuernagel wrote:

“Where the valley widens and the water becomes shallow, there are large numbers of trout that are easy to catch. Once while bathing, Schumacher saw a black water snake, almost a metre long. These are said to be very common here and are highly dreaded”².

The archaeologist N. Glueck visited Tall Zirā'a in 1942. He reported the

“singularly imposing and completely isolated hill of Tall Zera‘ah (...)”³

and mentioned a water source on the plateau of the tall as the

“result of a natural siphon phenomenon leading the underground flow of the water from the higher level of the hills beyond down to below the bottom and, as through a pipe piercing its center, up to the top of Tall Zera‘ah”.

Although the tall⁴ had already attracted attention due to its location and imposing appearance, no intensive research was conducted at this time, because of the hill's location close to the border of Israel in the west (c. 7 km) and Syria in the north (c. 14 km). During the foundation

1 Schumacher 1890, 110. 142 f. Schumacher visited Tall Zirā'a and described remains of rectangular buildings. His observations are published by C. Steuernagel (Steuernagel 1926, 81).

2 Steuernagel 1926, 80. Citation is given in English translation; cf. also Schumacher 1890, 142 f. For Schumacher's travels see in general: Schumacher 1886.

3 Glueck 1951a, 182 Fig. 71.

4 The Arabic word ‘tell’ or ‘tall’ as well as the Hebrew word ‘tel’ will be written in this publication in the standard literary Arab version ‘tall’ or ‘Tall NN’.

of the State of Israel in 1948 and again during the Six Day War in 1967, the western part of the Wādī al-‘Arab was declared by the Jordanians as a military zone. A passage which had been open in all directions for millennia was thus essentially cut off from sections of its surroundings. The territory around Gadara and the Wādī al-‘Arab, in the triangle where Jordan, Syria and Israel meet, became the north-westernmost corner of the Hashemite Kingdom, and there was not even a paved road to the tall.

Also the construction of the Wādī al-‘Arab Dam in 1978 did not make a significant difference to the *status quo*. The archaeologists who investigated the area within the scope of a rescue survey prior to the dam construction did not appreciate the archaeological potential of the tall, which majestically overlooked the future reservoir.

Another period of time passed until the Oslo Peace Agreement was ratified in 1993, but it was only after the peace treaty between Jordan and Israel, which King Hussein and Prime Minister Yitzhak Rabin signed on October 26, 1994, that the area again became accessible to the public.

D. Vieweger, director of the Biblical Archaeological Institute Wuppertal (BAI) and since 2005 also of the German Protestant Institute of Archaeology (GPIA), travelled many times through the north-western part of Jordan between 1998 and 2000, exploring the area for a suitable tall site, which would serve as an authoritative chronological record for the region’s long and important cultural history. He found it in the Wādī al-‘Arab.

Tall Zirā’a is located in the middle of the Wādī al-‘Arab (Figs. 0.1 and 0.2), was continuously occupied for at least 5,000 years, and offers an unique insight into the way of life of the region’s people. Its outstanding archaeological significance results from the artesian spring in its centre, which created optimal settlement conditions over thousands of years. For this reason, Tall Zirā’a offers an unusual opportunity to compile a comparative stratigraphy for northern Jordan from the Early Bronze Age to the Islamic period, while also making it possible to trace cultural developments in urban life, handicrafts and the history of religion over long periods. Moreover, here it is possible to study abundant remains from the Biblical periods in a broad cultural and historical context.

As mentioned above, a major trade route passed through the valley, connecting Egypt in the south with the Syrian-Mesopotamian region in the north (Fig. 1.22). The Wādī al-‘Arab also connects the Jordan Valley to the Mediterranean coast via the northern Jordan ford at Ġisr el-Maġāmi‘ (Gešer), as well as the plains of Jezreel and Tall al-Ḥiṣn (Beth Shean) to the eastern Jordanian highlands. It was possible to climb from the Jordan Valley, at some 290 m below sea level, to the fertile and very early populated Irbid-Ramtha basin, which lies around 560 m above sea level. Direct routes led from the Irbid-Ramtha

basin to Dimašq (Damascus) in the north, Baġdād in the east, and ‘Ammān in the south. Because the Yarmuk Valley to the north and the Wādī Ziqḷāb in the south are too steep and narrow to serve as major transport routes, the Wādī al-‘Arab played a prominent geopolitical role. Not surprisingly, economic success and the hard work of residents across the millennia have left a profusion of traces in the valley. More than 200 sites of human habitation, from the very earliest settlements to the Islamic period, provide an eloquent testimony to the history of this region: settlements, channels, water mills, cisterns, oil presses, wine presses, watchtowers and grave sites.

Tall Zirā’a offered good living conditions for a settlement. The artesian spring offered an unfailing water supply, and the hill provided security. The tall rises impressively (depending on the direction) between 22–45 m above ground. As the only prominent natural elevation in the lower Wādī al-‘Arab, Tall Zirā’a dominates the valley. From here one cannot only see Gadara, but also easily monitor the narrow entrance of the wādī to the west.

The adjacent fertile wādī ensured adequate nourishment, with potentially arable land in the western and central valley, terraced slopes and spurs suited for rainfed agriculture in the east, as well as the wādī slopes that are suitable for grazing small livestock, forming a broad semicircle from the east and south to the west. As a result of his observations, D. Vieweger decided to implement preliminary investigations here from 1998 to 2000.

The ‘Gadara Region Project’ was launched in 2001 by the Biblical Archaeological Institute Wuppertal (BAI), Germany. In the first season, the surface of Tall Zirā’a was explored⁵, the tall was accurately surveyed, and

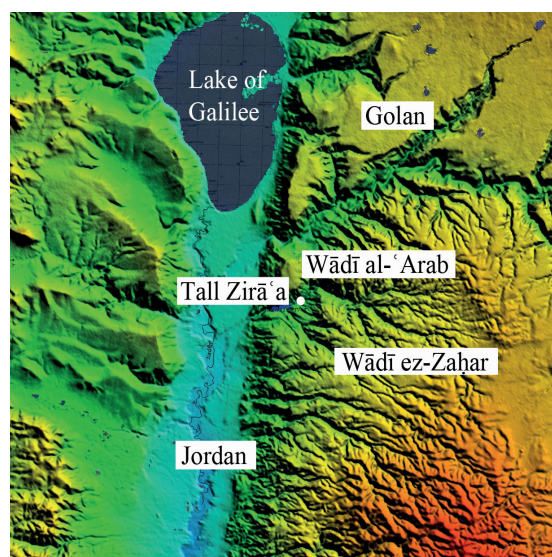


Fig. 0.2 Map showing the area around Tall Zirā’a (Source: BAI/GPIA).

5 See Vol. 1., Chap. 2. For this survey see also Vieweger et al. 2003, 191–216.