

## INTRODUCTION: THE 2010–2014 SEASONS

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This is the fourth report of the Megiddo Expedition's work. The first three reports presented the results of the excavations in the 1992–1996, 1998–2002 and 2004–2008 seasons (Finkelstein, Ussishkin and Halpern 2000; 2006; Finkelstein, Ussishkin and Cline 2013 respectively). This report deals mainly with results of the excavations in the 2010, 2012 and 2014 seasons.

**THE EXPEDITION**

During the seasons reported here, the excavations at Megiddo were carried out under the auspices of Tel Aviv University, with George Washington University as the senior American partner. Consortium institutions were Chapman University, Gettysburg College, Loyola Marymount University, University of Oklahoma, Vanderbilt University and the Jezreel Valley Regional Project.<sup>1</sup> In the 2010 and 2012 seasons the Expedition's directors were Israel Finkelstein and David Ussishkin (Tel Aviv University), with Eric H. Cline (George Washington University) serving as Associate Director (USA). David Ussishkin retired from the Expedition at the end of the 2012 season. In the 2014 season the Expedition was directed by Israel Finkelstein and Eric H. Cline, with Finkelstein directing the dig and Cline heading the Megiddo consortium. Since the 2016 season the Expedition has been directed by Israel Finkelstein, Matthew J. Adams (Albright Institute of Archaeological Research) and Mario A.S. Martin (Tel Aviv University; Leon Recanati Institute for Maritime Studies, University of Haifa). The Expedition is endorsed by the Israel Exploration Society, Israel's Nature and National Parks Authority (which maintains the site as a national park) and Viscount Allenby of Megiddo. Our friend Michael Allenby, who was associated with the Expedition for 20 years, passed away in October 2014—*yehi zichro baruch*.

In the three seasons under discussion, the Megiddo Expedition was generously funded by Chaim Katzman, Vivian and Norman Belmonte, Eugene M. Grant and Rami Ungar. Eugene M. Grant, who supported the expedition from its outset, passed away in 2018—*yehi zichro baruch*. Joshua Eisen and the Jacob M. Alkow Chair in the Archaeology of Israel in the Bronze and Iron Ages also supported the Expedition. Work on the finds from the 2010–2014 seasons was also supported by Jacques Chahine, the Dan David Foundation, the Shmunis Family Foundation and Mark Weissman.

**AREAS OF EXCAVATION**

Five areas were excavated in the 1992–1996 seasons: F on the lower mound; G in the Late Bronze gate; H on the northwestern edge of the mound; J in the Early Bronze Age temples compound; and K on the southeastern edge of the mound (Finkelstein, Ussishkin and Halpern 2000: Figs. 1.2–1.4). Seven areas were excavated in the 1998–2002 seasons: four of the “old” areas—F, H, J and K—and two new ones:

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<sup>1</sup> In the summer of 2014 work at Ashkelon and Jaffa terminated as a result of the conflict in Gaza. Groups of UCLA and Harvard students at those excavations were hosted by the Megiddo Expedition.

L in the northeastern sector of the mound and M in and around the Schumacher trench in the center (Finkelstein, Ussishkin and Halpern 2006: Figs. 1.1–1.3). Seven areas were excavated in the 2004–2008 seasons: five of the “old” areas—H, J, K, L and M—and two new ones: P on the lower terrace, at the foot of Stairway 2153 unearthed by the University of Chicago team, and Q in the southeastern sector of the mound, between our Area K and Area CC of the University of Chicago dig.

Five main areas were excavated in the 2010–2014 seasons (Figs. 1.1–1.2): four of the “old” areas—H, J, K and Q, and a new area—Area S—inside the University of Chicago’s Area AA. In addition, three soundings were explored in 2014—Area T adjacent to the southeastern corner of Assyrian Palace 1369, excavated by the University of Chicago in the 1920s, V in and around Building 338, excavated by both Gottlieb Schumacher and the University of Chicago in the eastern sector of the mound, and W in the northeastern sector, to the east of Palace 6000. Exploration of Area J was terminated at the end of the 2010 season; finds of the 2010 season are described in *Megiddo V*. This report deals with the finds in Areas H, K (including 2008 results in the latter), the northern section of Area Q (including the results of the first season there—2008), and Soundings V and W. Excavations in Areas S and T continued in 2016 and the results will be published in our next report. Table 1.1 details the history of the excavations.

A European Research Council-funded project titled *Reconstructing Ancient Israel: The Exact and Life Sciences Perspective* was directed by Israel Finkelstein of Tel Aviv University and Steve Weiner of the Weizmann Institute of Science in the years 2009–2014 (Finkelstein, Weiner and Boaretto 2015).

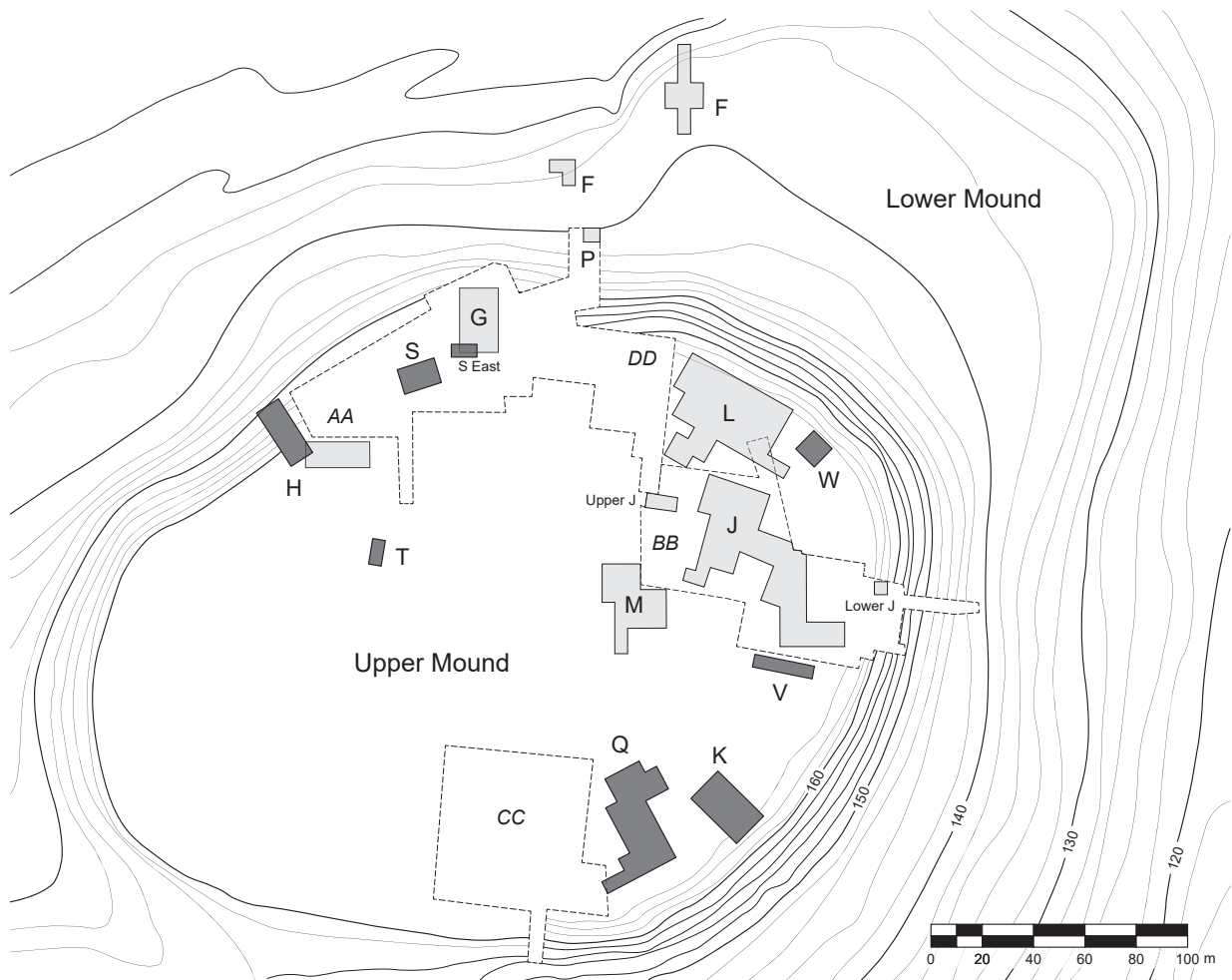


Fig. 1.1: Areas excavated in 2010–2014 (in dark gray).

TABLE 1.1: HISTORY OF THE EXCAVATIONS PER AREA AND PUBLICATION

Area	Season	Publication in the Megiddo Reports by Levels*			
		III	IV	V	VI
F	1994–2000	×	×		
G	1992–1993	×			
H	1994–2000, 2004–2014	H-1 to H-3	H-4 to H-7	H-5 to H-7 repeated H-8 to H-9	H-10 to H-15
J	1992–2000, 2004–2010	×	×	×	
K	1996–2014	K-1 to K-3	K-4, K-5	K-6 to K-8	K-9 to K-10
L	1998, 2000, 2004, 2006, 2007		×	×	
M	1998–2006		×	×	
N	1999		×		
P	2007			×	
Q	2008–2014				Q-1 to Q-6
S	2012		Excavated in 2012, to be reported		
T	2014		Excavated in 2014, to be reported		
V	2014				×
W	2014				×

\* × Refers to discussion of entire dig in the given area.



Fig. 1.2: Areas excavated in 2010–2014, looking south.

Teams related to this project worked at Megiddo in the seasons reported here, among them Elisabetta Boaretto and Michael Toffolo on radiocarbon dating (Toffolo *et al.* 2014); Meirav Meiri on ancient DNA (Meiri *et al.* 2013); Naama Yahalom-Mack and Adi Eliyahu on metallurgy (Yahalom-Mack *et al.* 2017); Lidar Sapir-Hen on archaeozoology. Some of the articles are reprinted in this volume.<sup>2</sup> Special effort was given to a geoarchaeology investigation in Area Q, which was directed by Ruth Shahack-Gross of the University of Haifa (then of the Weizmann Institute of Science; Regev *et al.* 2015; Fig. 1.3). In addition to participation in the main Megiddo seasons, the geoarchaeology team conducted short, between-season excavations: two weeks in October 2010, a week in October 2011 and a few days in April 2013.

Over 100 team members, paid workers and staff participated in each of the three seven-week seasons reported here. The Expedition's camp was set at Kibbutz Ramat Hashofet (2010–2012) and at the Givat Haviva educational facility (2014).

Following is a brief account of the excavation in each of the areas excavated in 2010–2014:

## AREA H

Excavation in 2010–2014 continued in the sectional trench (Squares E–F/6–9), under Level H-9 (University of Chicago's Stratum VIA, late Iron I). Iron I and Late Bronze remains were exposed. Reported here are the results of Levels H-10 to H-15.<sup>3</sup> For safety reasons, Squares E–F/6 were abandoned after the 2010 season and Squares E–F/7 were abandoned after the 2012 season. With the deepening of the dig, an additional pair of squares (E–F/10) was opened on the northern edge of the trench in 2014.

## AREA J

Excavations here, which started in 1992, came to an end at the close of the 2010 season. The results of the final season were reported in *Megiddo V*.

## AREA K

Excavation continued in 2010–2014, exposing remains of Levels K-9, K-10 and K-11, dating to the LB IIA, transition from the MB III to the LB I and MB III respectively. Burials associated with these layers were excavated, the most significant being Tomb 10/K/100, which dates to the MB III–LB I. Uncovering of the mudbrick core of a Middle Bronze rampart on the eastern edge of this area continued in all three seasons reported here. This report deals with Levels K-9 (excavation of this layer started in 2008) and K-10. Level K-11 and the mudbrick fortification will be dealt with in future reports.

## AREA Q

This area was opened in 2008 in the southeastern sector of the mound in order to reinvestigate the stratigraphy of the Iron II. Work was conducted in a large area of ca. 30 squares. Here we report the results for Levels Q-1 to Q-6, mainly in the northern sector of the area. In the southern sector (squares in Lines H and I) excavation continues through Levels Q-7 to Q-9 of the Iron I and LB III. The results will be published in the next Megiddo report.

## SOUNDING V

Excavations were carried out in 2014, mainly to the west and east of Unit 340 of Building 338 in order to resolve the dispute regarding the date of this important structure. Work in this field has been terminated and the finds are reported here.

<sup>2</sup> A stratigraphy-chronology update has been introduced at the end of three of these chapters as an addendum.

<sup>3</sup> Burial 16/H/45, which belongs to Level H-15, will be discussed in our next report.



Fig. 1.3: Microarchaeology laboratory in the field in Area Q, 2010.

## SOUNDING W

Excavations here (2014) revealed Iron Age remains related mainly to the Iron II. Work has been terminated and the finds are reported here.

## THE EXPEDITION TEAM

The staff of the Expedition is listed in Table 1.2.

In the months between the seasons reported in this volume, the Directors of the Expedition were assisted almost daily by Sivan Einhorn (Coordinator of the Megiddo Expedition at Tel Aviv University), Eran Arie, Zachary C. Dunseth, Assaf Kleiman and Mario A.S. Martin, who were involved in many decisions regarding the work of the Expedition and helped in the processing of the finds. The preparation of this report was supervised by Sivan Einhorn and Yana Kirilov, who replaced her in the Megiddo office in late 2018.

Staff members at the Institute of Archaeology of Tel Aviv University helped in the analysis of the finds and preparation of this report: Ami Brauner drew some of the plans; Yulia Gottlieb, Itamar Ben Ezra, Na'ama Earon and Rodika Pinhas drew the pottery and the artifacts; Pavel Shrago and Sasha Flit prepared the photographs; Yafit Wiener and Shimrit Salem restored the pottery; Benjamin Sass helped in analyzing the artifacts. Yelena Roban drew some of the pottery vessels. Special thanks go to Myrna Pollak, who edited the volumes and to Noa Evron, who was responsible for the layout.

The Directors of the Expedition are indebted to the following individuals, who assisted the work at Megiddo: Shaul Goldstein, Director of Israel's Nature and National Parks Authority; Ahmad Agrabiah, Lucy Yosef and Zeev Margalit of the Nature and National Parks Authority and Uri Flash of Kibbutz Ramat Hashofet.

TABLE 1.2: STAFF OF THE MEGIDDO EXPEDITION

	Season		
	2010 (Fig. 1.4)	2012 (Fig. 1.5)	2014 (Fig. 1.6)
Directors	Israel Finkelstein, David Ussishkin, Eric Cline	Israel Finkelstein, David Ussishkin, Eric Cline	Israel Finkelstein, Eric Cline
Coordinators	Margaret Cohen, Sivan Einhorn, Norma Franklin	Margaret Cohen, Sivan Einhorn	Margaret Cohen, Sivan Einhorn
Coordinator of educational program	Eric Cline	Julye Bidmead	Eric Cline
Registrar	Margaret Cohen	Margaret Cohen	Maayan Mor
Surveyor	Alexander Pechuro	Alexander Pechuro	Alexander Pechuro
Computer analysts	Elena Zapassky	Peter Ostrin, Elena Zapassky	Peter Ostrin, Adam Prins
Photographer	Pavel Shrago	Pavel Shrago	Per area
Area supervisors	Matthew Adams (J), Eran Arie (H), Norma Franklin (Q), Mario Martin (K)	Matthew Adams (S), Eran Arie (H), Robert Homsher (Q), Mario Martin (K)	Melissa Cradic (H), Robert Homsher (Q), Assaf Kleiman (T, V, W), Mario Martin (K)
Assistant area supervisors	Yaniv Agmon (H), Julye Bidmead (H), Katia Charbit-Nataf (J), Ian Cipin (Q), Melissa Cradic (K), Jonathan David (Q), Julie Ellis (J), Philippe Guillaume (Q), Robert Homsher (K), Kristine Merriman (K), Adam Prins (H), Matthew Schaeffer (K), Jen Thum (Q)	Yaniv Agmon (H), Shirly Ben-Dor Evian (K), Julye Bidmead (H), Mirah Burgener (K), Melissa Cradic (K), Jonathan David (Q), Daniel Devery (S), Zachary Dunseth (S), Charles Friedman (Q), Assaf Kleiman (Q), Nicholas Kraus (Q), Kyle Leonard (K), Maayan Mor (K), Raphaela Primus (Q), Adam Prins (H), Matthew Schaeffer (K), Becky Simon (H), Jen Thum (Q), Idan Jonish (Q)	Shirly Ben-Dor Evian (T), Mirah Burgener (K), Margaret Cohen (Q), Zachary Dunseth (W), Charles Friedman (Q), Erin Hall (Q), Adam Kaplan (V), Nicholas Kraus (Q), Lee Oz (H), Adam Prins (K), Matthew Schaeffer (K), Jen Thum (K)
Archaeozoologists	Lidar Sapir-Hen, Assaf Kleiman	Lidar Sapir-Hen	Lidar Sapir-Hen
Microarchaeology	Steve Weiner, Ruth Shahack- Gross	Steve Weiner, Ruth Shahack- Gross, Lior Regev	Ruth Shahack-Gross, Mathilde Forget, Steve Weiner
Administration	Amir Eshhar	Emanuel Roosuu	Gilad Zafran

## PRESERVATION AND PRESENTATION

As mentioned in our previous reports, the Expedition is involved in promoting preservation and restoration work at Megiddo, as well as presentation of the site to the public. During the period reported here the Nature and National Parks Authority and the Government Tourism Corporation conducted preservation and restoration work in Palace 6000 and parts of the northern stables which are superimposed over the palace (Fig. 1.7).

Two major problems face the excavator of a Near Eastern mound: how to preserve the baulks of the dig and to prevent them from collapsing; and how to prevent erosion from undermining the stability of the ancient monument. These issues are especially crucial at Megiddo, where deep trenches and sections



Fig. 1.4: The Megiddo staff, 2010. Standing, from left: Robert Homsher, Ian Cipin, Jonathan David, Matthew Schaeffer, Yaniv Agmon, Katia Charbit-Nataf, Melissa Cradic, Adam Prins, Jen Thum, Julie Ellis, Kristine Merriman, Assaf Kleiman and Amir Eshkhar. Sitting, from left: Julye Bidmead, Mario Martin, Eran Arie, Norma Franklin, Israel Finkelstein, David Ussishkin, Eric Cline, Matthew Adams, Margaret Cohen and Sivan Einhorn.



Fig. 1.5: The Megiddo staff, 2012. Standing, from left: Shirly Ben-Dor Evian, Daniel Devery, Jonathan David, Adam Prins, Assaf Kleiman, Becky Simon, Jen Thum, Zachary Dunseth, Melissa Cradic, Maayan Mor, Alexander Pechuro, Peter Ostrin, Matthew Schaeffer, Kyle Leonard and Mirah Burgener. Sitting, from left: Emanuel Roosuu, Margaret Cohen, Matthew Adams, Julye Bidmead, David Ussishkin, Israel Finkelstein, Eric Cline, Robert Homsher, Sivan Einhorn, Eran Arie and Mario Martin.

were cut by Gottlieb Schumacher at the beginning of the 20th century, by the University of Chicago team in the 1920s and 1930s and by our team. One means of protecting the mound is to backfill those places which are not essential for future excavation or for presentation of the monuments to the public. Following is a list of places backfilled by the Expedition in 2010–2014—both places dug in the past (No. 1 below) and some of its own squares (Nos. 2–11; Fig. 1.8):

1. In 2014, backfilling continued in the University of Chicago deep and narrow trench dug from Area AA to the south (their Square L–M/8, Loud 1948: Fig. 377).
2. In 2010 two deep squares (L/7–8) were backfilled in Area J, immediately to the west of the Great Temple's hall; this was done in order to prevent damage to the western side of the Great Temple.



Fig. 1.6: The Megiddo staff, 2014. Standing, from left: Alexander Pechuro, Matthew Schaeffer, Peter Ostrin, Nicholas Kraus, Shirly Ben-Dor Evian, Adam Prins, Zachary Dunseth, Mathilde Forget, Jen Thum, Lee Oz, Erin Hall and Charles Friedman. Sitting, from left: Sivan Einhorn, Adam Kaplan, Gilad Zafran, Margaret Cohen (with Atticus Adams), Assaf Kleiman, Mario Martin, Israel Finkelstein, Eric Cline, Robert Homsher, Melissa Cradic and Maayan Mor.



Fig. 1.7: Palace 6000 and northern stables after preservation and restoration by the National Parks Authority.

3. In the same year, the sounding inside the main hall of the Great Temple in Area J (Squares J/7–8) was backfilled.
4. Also in Area J, 2010, small soundings along the eastern wall of Temple 5192 were backfilled.
5. In 2014 the National Parks Authority constructed a pseudo brick wall along the line separating the altar and the main hall of the Great Temple in Area J. Consequently, the area of the altar (Squares E–F/9) was partially backfilled in order to prevent further erosion of Temple 4040 above it.
6. In 2010 the eastern part of Area M in Squares AV/27–30 was backfilled in order to stabilize Chamber f.



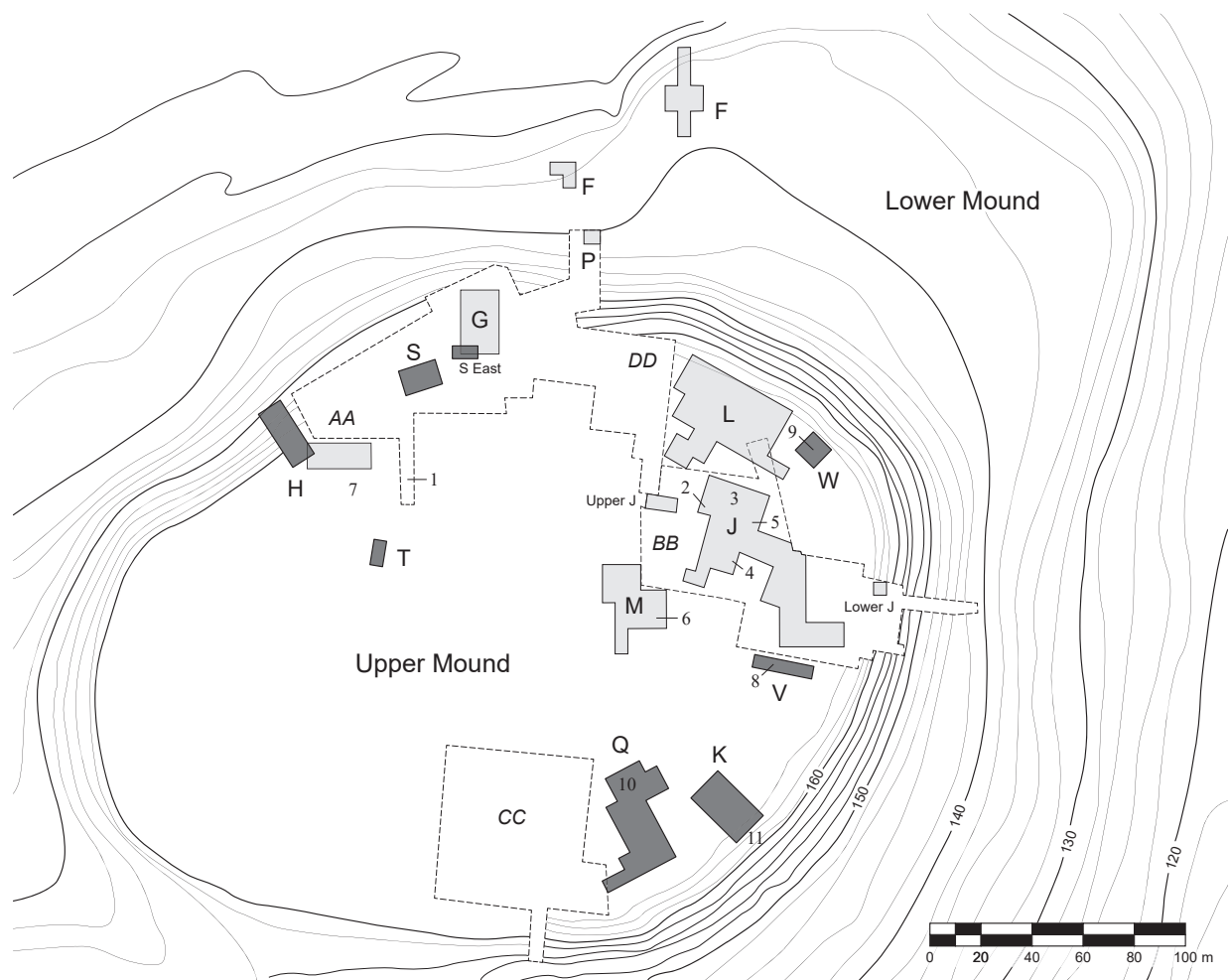


Fig. 1.8: Map of areas backfilled by the Expedition in 2010–2014 (numbers corresponding to text).

7. A small area dug under the floor of the courtyard of Assyrian Palace 1369 in 1996 was backfilled in 2014 (Square X/39 in Joffe, Cline and Lipschits 2000: 151; Fig. 7.1).
8. The Area V squares were backfilled immediately after the 2014 season in order to prevent destruction of the remains of Building 338.
9. Most of the dig in Area W was backfilled at the end of the 2014 season in order to prevent erosion in this sensitive part of the mound.
10. Probes cut in the northern sector of Area Q were backfilled in 2014.
11. Half squares along the outer face of the Middle Bronze mudbrick fortification wall in Area K were backfilled in 2014 in order to prevent destruction by erosion of the fortification.

## ADVANCES IN DATA DOCUMENTATION

Since the 2012 season, the Megiddo Expedition has deployed four total stations to record accurate spatial references of field data on the New Israeli Grid—the Israeli Transverse Mercator (ITM)—in terms of easting (X), northing (Y) and elevation (Z).<sup>4</sup> Three different total station models are used: The Leica

<sup>4</sup> Each point taken also records metadata, such as date and time and, most importantly, classification (e.g., locus, basket, artifact).

TS06, the Leica TS09 and the Trimble M3. To guarantee precision and repeatability, all total stations are sent for calibration before each season.

In order to facilitate utilization of the instruments, the Expedition supplemented existing surveyor points with a set of new, accurate fix points using the most up-to-date GPS technology (for these new points, see Fig. 1.9 and Table 1.3). These fix points cluster around our main areas, but were also laid out to allow access to every potential future area. To be available over a long term, they are visible and embedded deeply in the ground with concrete or, in a few cases, established on massive ashlars of existing monuments.

Beyond laying out our grids, in daily fieldwork, data points are recorded for several purposes. They aid our surveyor in generating accurate architectural plans. Moreover, we index locus elevations and boundaries, basket elevations and the location of special finds (artifacts, vessels, etc.), thus creating data sets for spatial analysis.

The data obtained from the total stations augment the data structure that has been in use since the first main season in 1994 (for the Megiddo digital recording system, see Benenson and Finkelstein 2000; Zapassky and Benenson 2006). Our database has been slightly adapted; the newly recorded points were



Fig. 1.9: Map indicating newly established fix points.

TABLE 1.3: FIX POINTS ESTABLISHED BY THE MEGIDDO EXPEDITION (SEE FIG. 1.9)

Point name	Easting (X)	Northing (Y)	Elevation (Z)
K1	217659.98	721133.87	166.19
K3	217634.48	721139.55	168.19
K4	217638.73	721126.39	167.67
M1	217500.59	721297.54	153.16
M1A	217516.46	721315.94	152.88
M2	217528.78	721285.71	161.15
M3	217631.59	721275.94	162.31
M4	217694.19	721254.85	164.61
M5	217663.37	721195.07	166.75
M6	217615.15	721159.20	168.13
M7	217555.06	721099.54	166.07
M8	217484.43	721124.80	168.33
M10	217485.87	721269.42	163.12
M11	217564.51	721288.19	157.61
M13	217602.94	721241.94	159.67
M17	217554.22	721160.07	166.77
M19	217542.05	721205.35	165.77
M111	217451.98	721193.93	163.48

linked to their database entities (e.g., locus, artifacts, etc.). The advantage of this new procedure is that every piece of data has its absolute spatial identifier.<sup>5</sup>

To put the new instrumentation to proper use, the Megiddo Expedition has introduced several additional tools to enhance data visualization and accuracy. Our own software (*TS Sectioner*) has been devised to improve the accuracy of section drawings. Georeferenced 3D models are created using *PhotoScan* by Agisoft (for a presentation of these models, see Chapter 8). With the same software georeferenced orthophotos are produced. This enables us to generate georectified aerial views mid-season (e.g., Fig. 2.13), without the need to remove the shades. Additional software employed includes *Autocad* by Autodesk, *Illustrator* by Adobe and *ArcGis* by Esri.

As advanced digital recording has become more and more prevalent in field archaeology, we train our staff members in the use of the total station and of the above-mentioned software.

## MEGIDDO EVENTS

### AN INTERNATIONAL WORKSHOP ON DATING METHODS, MEGIDDO 2010

Megiddo offers the best stratigraphic sequence in the Levant for the Bronze and Iron Ages, including a set of destruction layers which present rich pottery assemblages that form the basis for relative (ceramic) chronology. As a result, it constitutes an optimal laboratory for testing absolute dating methods in archaeology. Hence on June 20–22, 2010, the Megiddo Expedition organized an international workshop on absolute dating methods

<sup>5</sup> A word of caution: we use highly accurate equipment, which in theory is exact to a few millimeters. In practice, the situation in the field is slightly different. Environmental conditions such as temperature and direct exposure to sunlight, as well as the operators' experience—generally not professional surveyors—de facto result in inaccuracies of up to 5 cm.

at the site, titled *Synchronizing the Clocks at Armageddon*. The goal of the workshop was to review the different dating methodologies, and to discuss how to optimally combine them to achieve the most precise possible dating. The workshop included detailed reviews by experts on four different dating methods—radiocarbon, paleomagnetism, optically stimulated luminescence and rehydroxilation. Discussions focused on how to combine data from these dating methods to achieve reduced dating uncertainties. The conference was organized by Eli Piasezky, Murray Moinester and Israel Finkelstein of Tel Aviv University. Following is the list of participants and themes presented (sessions were chaired by Margaret A. Carter of the University of Manchester, Eric H. Cline of George Washington University, Gilad Shalev of MIT, and Uzi Smilansky and Steve Weiner of the Weizmann Institute of Science):

Israel Finkelstein, Tel Aviv University: *Conventional Dating Based on Archaeological and Historical Considerations*

David Ussishkin, Tel Aviv University: *Ancient Megiddo—Past Research*

Eli Piasezky, Tel Aviv University: *Why Are We Here?*

Eran Arie, Tel Aviv University: *Never Ask a Potsherd Its Age: From Pottery to Relative Chronology*

Avshalom Karasik, Hebrew University, Jerusalem: *Computerized Classification of Large Ceramic Assemblages—A Quantitative Basis for Relative Chronology*

Elisabetta Boaretto, Weizmann Institute of Science: *Radiocarbon Dating*

Walter Kutschera, University of Vienna: *Radiocarbon Dating*

Amotz Agnon, Hebrew University, Jerusalem: *Deciphering the Temporal Variation of the Earth's Magnetic Field—A Potential Method for Precise Dating of Baked Clays*

Naomi Porat, Geological Survey of Israel: *Luminescence Dating of Sediments from Megiddo and Insights into Depositional Processes*

Moirra Wilson, University of Manchester: *RHX—Recent Developments*

Christopher Hall, University of Edinburgh: *RHX—Some Scientific Observations and Issues*

## MEGIDDO CELEBRATES ITS 20TH ANNIVERSARY IN BALTIMORE

The Megiddo Expedition celebrated its 20th anniversary at a special session of the annual meeting of the American Schools of Oriental Research, which was held in the Sheraton Baltimore City Center Hotel in October 2013. The session was titled *Twenty Years of Digging at Megiddo: Macro and Micro Archaeology Discoveries*. The session summarized some of the main finds, emphasizing recent advancements and discoveries. Eric H. Cline and Israel Finkelstein presided. The following papers were presented:

David Ussishkin, Tel Aviv University: *Introduction*

Elisabetta Boaretto, Weizmann Institute of Science, Michael Toffolo, Tel Aviv University and Israel Finkelstein, Tel Aviv University: *Radiocarbon Dating Megiddo*

Matthew J. Adams, University of Hawai'i and Mario A.S. Martin, Tel Aviv University: *The Middle Bronze Fortifications with Reference to the Reinvestigation of Monuments Uncovered by the Oriental Institute*

Eran Arie, Israel Museum and Israel Finkelstein, Tel Aviv University: *New Light on the Destruction of Egypto-Canaanite Megiddo and the Sea Peoples*

Naama Yahalom-Mack, Tel Aviv University and Adi Eliyahu-Behar, Weizmann Institute of Science: *Megiddo Metallurgy from the Late Bronze III through the Iron IIA*

Ruth Shahack-Gross, Weizmann Institute of Science, Robert Homsher, University College London, Lior Regev, Weizmann Institute of Science, Dan Cabanes, Weizmann Institute of Science and Assaf Kleiman, Tel Aviv University: *Geoarchaeological Investigation in a Domestic Iron Age Quarter*

Lidar Sapir-Hen, Tel Aviv University and Eran Arie, Israel Museum: *Patricians and Plebeians Reflected in the Material Culture of Iron I Megiddo*

## NOTES ON THE FORMAT OF *MEGIDDO VI*

For the first time in the history of the Megiddo reports, we are reprinting here Megiddo-based articles that have been published in scholarly journals (some of the chapters in Sections seven, eight and nine). The reader should note that in the original publications some had online supplementary material which is not included here. In addition, trivial information about Megiddo, which was needed in the case of articles published in journals that are not specific to the Levant, has also been omitted.

In what follows we repeat some of our notes in the introduction to the previous Megiddo reports. The policy of the Megiddo Expedition is to publish a full report after every three seasons of excavation. This decision was taken in order to avoid delay in publication, which may stem, among other reasons, from an accumulation of an immense quantity of data over a period of many years. The fast-track publication system has some obvious shortcomings, especially in regard to conclusions, which may change as the excavation advances. In order to minimize this risk, it has been the practice of the Expedition to finish a manuscript on, e.g., Seasons A through C before Season D, to enter notes in the manuscript in view of the results of Season D (which are not described in the text) and to publish the report before Season E. Accordingly, the manuscript of *Megiddo VI* was updated according to results of the 2016 season.

Another decision taken is that the introductory chapter of each final report include a list of issues that were described in the previous report which require updating. In Area K, additional remains of Level K-8 (LB IIB)—already mostly excavated during the 2004 and 2006 seasons and published in *Megiddo V*—were unearthed during the 2008 and 2010 seasons, adding to (and altering) the architectural plan of this stratum. For an update on Level H-9 in Area H, see Chapter 4.

Table 1.4 summarizes the stratigraphy of Megiddo, updated to the end of the 2014 season.

The registration method of the Megiddo Expedition is based on a three-tier hierarchy, from the locus through the pottery bucket (PT, considered a “find”) to four categories of other finds which are related to the pottery bucket, i.e., artifact (AR), vessel (VS), laboratory item (LB) and flint item (FL). Walls are registered separately and are given locus numbers when excavated. The locus number consists of three components: season, area and sequential number. For instance, **06/K/12** means the season of **2006**, Area **K**, locus number **12**. Finds are registered in the same way. Their number includes the locus number with the addition of two letters indicating the type of find (PT, AR, VS, LB or FL) and its sequential number within the locus. For instance, **06/K/12/AR3** represents artifact number **3** in Locus 06/K/12. Walls are registered in a somewhat similar way: **06/K/WL11** signifies Wall 11 in Area K, season of 2006. Loci are marked on the plans in regular font, walls in *italics*, and groups of loci taken together as a unit are given a unit designation, which is underlined. In the plans, walls and other elements shaded in gray are reused from a previous level.

The term *level* is used in this report for the stratigraphy of the renewed excavations and *stratum* for that of the University of Chicago Expedition. Levels are counted locally, per area. For instance, **H-9** means Level **9** in Area **H**. Levels are counted from top to bottom in all areas except for Area J. Because of the nature of excavation in Area J—investigation of the buildings unearthed by the Oriental Institute excavators, beginning with Shrine 4050 of Stratum XIX and continuing with later temples—levels have been counted from bottom to top. In many places in this report the local levels are compared to those of the Oriental Institute strata for the entire site.

The general grid of the renewed excavations follows the grid of the University of Chicago Expedition, with two alterations: 1) Every square of 25 × 25 m was divided into squares of 5 × 5 m; the 5 × 5 m grid utilizes a new set of numbers and letters. 2) In several places the topography or orientation of monumental remains from previous excavations required the setting of a local grid oriented differently from the general grid of the excavations. Local grids were used in all areas reported here.

TABLE 1.4: SUMMARY OF THE MEGIDDO STRATIGRAPHY (MAIN AREAS\*), UPDATED TO 2014

Period	UoC Stratum	Area						
		Q	M	L	K	J	H	F
EB I	XX					J-1		
EB IB	Phase in XIX**					J-2		
	XIX					J-3		
	XVIII					J-4		
	Not detected					J-4a		
EB III	XVII					J-5		
	XVII					J-6b		
	XVI					J-6a		
EB III/IBA***	XV				J-7			
Intermediate Bronze and Middle Bronze I levels, probably the equivalent of Strata XIV–XIII, not unearthed yet in the renewed excavations								
MB II	XII		M-11					F-12
	XI		M-10					
			M-9					
MB III–LB I	X (X-IX)		M-8		K-10			F-11
LB I	IX		M-7				H-15	F-10
LB IIA	VIII				K-9†		H-14	F-9
LB IIB	VIIB				K-8		H-13	F-8
					K-7			
LB III	VIIA	Q-9	M-6		K-6		H-12	F-7
Early Iron I	Not detected						H-11	
Early Iron I	VIB	Q-8	M-5		K-5		H-10	F-6
Late Iron I	VIA	Q-7	M-4	L-5	K-4		H-9	F-5
Early Iron IIA	VB	Q-6	M-3	L-4	K-3		H-8	
			M-2				H-7	
			M-1				H-6	
Late Iron IIA		Q-5					H-6	
Late Iron IIA	VA-IVB	Q-4		L-3	K-2		H-5	
Iron IIB	IVA	Q-3		L-2	K-1		H-4	F-4b
		Q-2					H-3	
Iron IIB	Not detected						H-2	
Iron IIB	III	Q-1		L-1			H-1	F-4a
Iron IIC	II							F-3
								F-2
								F-1

\* For Levels J-8 to J-17, investigated in a limited area, see Adams 2013; Finkelstein, Ussishkin and Cline 2013: 17; For Levels N-1 to N-4 at the foot of the main mound, see *ibid.* For Areas V and W, see this report.

\*\* Not identified as a separate level.

\*\*\* Finkelstein, following Kempinski, dates the “Megaron Temples” of Level J-7 (Stratum XV) to EB III (Finkelstein 2013), while Ussishkin (2013) and Adams (2013), following Loud, are inclined to date them to the IBA.

† Levels K-9 and, probably, H-14 continue into the early LB IIB.

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