LET THE STONES SPEAK

The magazine of the
ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY

SEPTEMBER-OCTOBER 2026



DISCOVERED:

Jerusalem's 'House of Mikvehs'



LET THE STONES SPEAK

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Herbert W. Armstrong College students participate in a bucket chain.

COVER: AUBREY MERAD/ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY



FROM THE MANAGING EDITOR
BRAD MACDONALD

The Power of Archaeology to Add Meaning to Life

Twenty years ago this October, something very special for us happened in Jerusalem. In October 2006, three students from Herbert W. Armstrong College arrived in Israel to serve beside the late Dr. Eilat Mazar on her City of David excavation. This was a sensational introduction to Jerusalem archaeology for these students: They were excavating the palace of David alongside the best biblical archaeologist in the world!

As our regular readers know, that October 2006 dig renewed a partnership with the Mazar family and Hebrew University that had begun with Herbert W. Armstrong and Ambassador College in 1968. But that dig with Eilat was *our* first exposure to archaeology and Jerusalem.

As you can imagine, for a small college in Oklahoma, sending three students to Israel was a huge and exciting development. I still remember the buzz on campus. If we had let them, the entire student body would have dropped everything and left for Jerusalem.

Little did we know at the time just how sizable our work in Israel would become!

Over the past two decades we have participated in 13 excavations and have had more than 150 volunteers

serve on digs in Jerusalem. We now not only participate in and sponsor regular annual excavations; we give tours of the Ophel and City of David; we produce a magazine, podcast and website; and we operate an office in Jerusalem with the complete academic libraries of Prof. Benjamin Mazar and Dr. Eilat Mazar. It has been a fruitful two decades for our work in Jerusalem!

Over the past 20 years we have met and worked with many talented and brilliant scientists, and have formed close friendships with some wonderful people in the archaeological community in Israel and around the world. Our excavations were initially directed by Dr. Mazar. Since her death in 2021, we have been working with Hebrew University professors Uzi Leibner, Orit Peleg-Barkat and Yosef Garfinkel. All three are outstanding archaeologists and, more importantly, individuals of upstanding character and love.

There is something rare and moving about working on an archaeological dig—something beyond the systematic unearthing of human history that every excavation promises, which is wondrous. I'm talking about the other discovery, the subtle one that occurs when strangers work side by side in the same dust and become a family. This happens when people of every personality and background and from every corner of life are united by a single purpose.

One lesson from 20 years of working on archaeological digs is this: Excavating can bring tremendous meaning to life!

At the end of every season, the Ophel family of diggers gathers for one final dinner. It's an opportunity for the excavation's directors, supervisors, office staff and volunteers to come together and share memories and stories from the excavation.

This year's dinner on July 30 was particularly special because it marked the end of an era. This was our final season (for now) of excavating with professors Leibner and Peleg-Barkat. They will be taking a break from field excavation to focus on publishing reports. I would like to extend my sincere gratitude to them for their warmth, hospitality and commitment to our common goal of sharing Jerusalem's archaeology. And for taking care of our students and volunteers as if they were their own children. If you ever have the opportunity to dig (or work) with Uzi or Orit, I recommend you take it!

At the end-of-dig dinner, Professor Leibner gave a profound speech on archaeology. He didn't speak about the awe-inspiring discovery of ancient peoples and civilizations, but about something just as remarkable: the human experience of the excavation itself. Professor Leibner graciously shared his notes with us, and we are honored to pass his message on to our readers.



WHEN PEOPLE HEAR ABOUT archaeology, they usually think about discoveries.

They imagine the moment when a beautiful object comes out of the ground or when the outline of an ancient building suddenly appears.


Prof. Uzi Leibner

What they don't imagine are the thousands of ordinary moments that make those discoveries possible.

Every wall we uncovered this season began with someone filling another bucket.

Every floor we exposed began with someone moving another shovel of dirt.

Every important piece of pottery first passed through someone's hands at the washing station.

Every photograph, every drawing, every elevation, every locus sheet—none of them is very exciting by itself. But together they allow us to reconstruct the past.

Archaeology constantly reminds us of something that is true far beyond archaeology: Short-term results often come from intensity. Long-term results come from consistency.

Real success comes from doing



Armstrong volunteers dust the large Ophel pool for final photos.



Stephen, Jude, Zach and Lance move a worked stone.



Azariah works to find the continuation of a clay pipe.



Quinn works in an upper room in Area D1.

the obvious things well, day after day, without losing patience, without cutting corners, and without deciding that the ordinary work no longer matters.

This season wasn't built on dramatic moments.

It was built on getting up early every morning.

On carrying buckets.

On scraping another layer.

On measuring elevations.

On washing pottery.

On filling out another locus sheet.

On asking one more question.

And perhaps most importantly, on coming back the next day and doing it all over again.

That is what archaeology teaches us. The discoveries we celebrate are never isolated moments of brilliance. They are the accumulated result of ordinary work done faithfully, day after day.

I think that is one of the greatest lessons archaeology teaches us—not only about the ancient past but about life.

The buildings we uncovered this season were themselves created one stone at a time, one day at a time, by people whose names we will probably never know.

And in a way, we excavated them the same way they were built: through countless small actions, faithfully repeated.

One of the beautiful things about archaeology is that it is impossible to excavate alone.

Every significant discovery is a collective achievement. By the time a wall emerges from the ground or an inscription comes to light, it already belongs to everyone who helped make that moment possible. Archaeology has a wonderful way of dissolving the distinction between "my discovery" and "your discovery." Every find becomes our discovery because it rests on the dedication, patience and care of an entire team.

That is why my thanks this evening are not simply a formality; they are an acknowledgment of how archaeology truly works.

First, I want to thank the Armstrong Institute of Biblical Archaeology. Ours is no longer simply an institutional collaboration; it has become a genuine partnership and, over the years, a friendship. Year after year, you place your trust in us by sending remarkable students who come to Jerusalem ready to work hard, to learn and to contribute. We are deeply grateful for your generous support, your confidence in our project, and, above all, for the wonderful people you send to excavate with us. They arrive as volunteers, but they leave as colleagues and friends.

I also want to thank each and every one of our individual volunteers. You came from across the United States, from Europe, from the Far East, and some even from here in Israel, bringing with you different backgrounds, experiences and perspectives. Yet within a remarkably short time, you became one team.

Many of you are not here for the first time. Some have returned for a second season, some for a third, and a few have become such familiar faces that it is difficult to imagine an Ophel excavation without you. Your willingness to come back, year after year, is the greatest compliment this project could receive. You are no longer simply volunteers—you are part of the Ophel family, and we are deeply grateful for your hard work, your enthusiasm and your friendship.

SEE **MEANING** PAGE 31

AUBREY MERCADO/ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY (6)

Celebrating Milestones

Marking 20 years of renewed excavations and 10 years of biblical archaeology content

BY ARMSTRONG INSTITUTE STAFF



The 2025 Armstrong College and Armstrong Institute excavators

"I HAVE TO WARN YOU GUYS THAT YOU ARE GETTING closer and closer to becoming archaeologists, professional archaeologists, and in the end you will end up building an institution, you know—an institute of archaeology at the college!" These were the words of the late, great Dr. Eilat Mazar, our beloved mentor, in a 2007 interview with Herbert W. Armstrong College (AC) student and excavation photographer Edwin Trebels.

As noted in the From the Managing Editor (page 1), this September-October 2026 issue marks an important milestone for us: 20 years of renewed excavations in Jerusalem, with the first Armstrong College students joining the City of David excavations in October 2006.

In fact, this September-October issue marks another important milestone for us: 10 years of producing dedicated biblical archaeology content, in an online and print initiative begun in September 2016.

Together, these efforts have culminated in the Armstrong Institute of Biblical Archaeology as you know it today. Here's the rundown of what brought us to this point—some of the exciting facts and figures—and where we are heading.

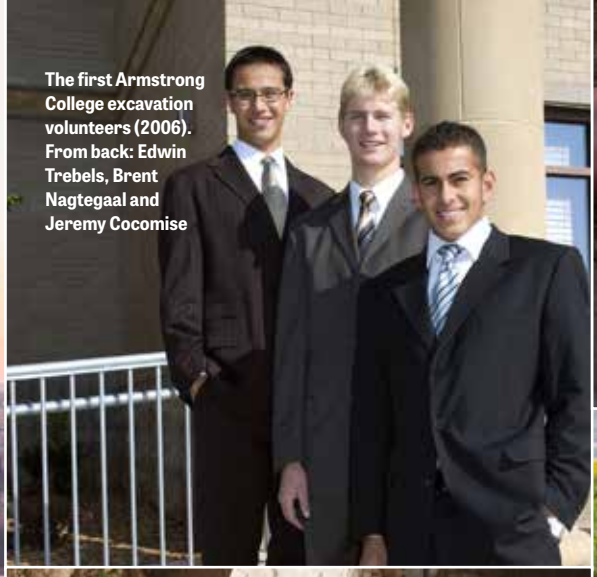
Two Decades of Renewed Excavations

In October 2006, the first batch of students from Herbert W. Armstrong College arrived in Jerusalem, Israel, to participate in the excavations of Dr. Eilat Mazar. Some 30 years prior, the students of our namesake's Ambassador College concluded excavations on Jerusalem's Ophel under the direction of Eilat's grandfather, the acclaimed archaeologist (and a close friend of Herbert Armstrong), Prof. Benjamin Mazar. Hundreds of Ambassador students participated in the summer excavations, from 1969 to 1976.

It was a small start for us in 2006, with only three students—yet in the words of the Prophet Zechariah, "who dares make light of small beginnings?" (Zechariah 4:10; New English Translation). Those three students pulled significant weight—one going on to become excavation photographer (Trebels), and another area supervisor (Brent Nagtegaal), a role he has continued to this current year. And since that initial day of "small beginnings," we've gone on to participate in 13 excavations in Jerusalem, sending more than 150 volunteers. We've fully funded excavations; besides regular workers, we've staffed excavations—with two individuals serving as area supervisors, five serving as assistant area supervisors, and six as excavation photographers; and we continue to play a role in planning and funding for site development and tourism, as well as providing tours of the excavation sites, giving interviews to media channels, etc. We've also sent students and staff for several months to assist in post-excavation office work and publication, documenting and publishing finds from the excavations.

In 2021, Dr. Mazar's death at the age of 64 came as a shock. With the loss of our mentor, with whom we had





The first Armstrong College excavation volunteers (2006). From back: Edwin Trebels, Brent Nagtegaal and Jeremy Cocomise



The menorah medallion in situ during the 2013 excavation



Gerald Flurry tours the Ophel with the late Dr. Eilat Mazar.



The 2008 Armstrong College volunteers



The 2025 team wraps up excavations at the site.



Vienna Flurry excavates a wall.

participated in six excavations, questions surrounded when and how we could move forward in excavating Jerusalem.

In the years since, we have never dug more often, with seven excavations in the past five years—initiating excavations with Hebrew University professors Uzi Leibner, Orit Peleg-Barkat and Yosef Garfinkel.

In 2023, following the catastrophic massacre of Israelis on October 7, questions again arose surrounding Israel's ongoing state of war and the prospect of future excavations. In the years since, numerous international teams have pulled out of the country and excavations have been canceled.

We've only gone in, faster and harder than ever before. In the three years since Oct. 7, 2023, we've completed *five* excavations—our teams of AC students and AIBA staff eager to excavate even in times of war, showing solidarity with Israel in uncovering thousands of years of Jewish history.

And the excavating is only one side of the story—only one cause for celebration with this issue.

A Decade of Publishing Content

A decade ago, a dedicated publishing project began with the (now retired) *Watch Jerusalem,* a resource devoted to both news analysis and popular biblical archaeology content, with a website, YouTube channel and bimonthly magazine. That platform ran until January 2022, when it gave way to a single institute and platform dedicated entirely to biblical archaeology: the Armstrong Institute of Biblical Archaeology, with its website, *ArmstrongInstitute.org;* its bimonthly magazine, *Let the Stones Speak;* podcast; YouTube channel; an institute in Jerusalem; and excavations in partnership with the affiliated Herbert W. Armstrong College.

Perhaps you discovered us only recently, or perhaps

ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY (6); MEDALLION: ESTATE OF DR. EILAT MAZAR PHOTO; DURIN TADMOR



Armstrong College student Christopher Eames excavates a Byzantine tower in 2012.

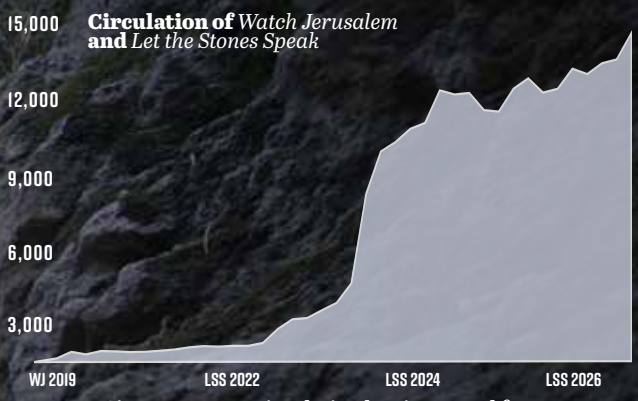
you have been a longtime subscriber going back to the days of *Watch Jerusalem.* Either way, 10 years on from late 2016, you are now reading roughly the 1,000th article we have produced, crossing the four-digit threshold just in time for this issue and our 10-year anniversary. With most articles running into the low thousands of words, that amounts to several million words' worth of content produced for you, our beloved reader.

Yet a decade of work and a grand total of 1,000 published articles by nearly three dozen authors is hardly our only cause for celebration. Here's a quick rundown of some of the facts and figures we're most excited about.

We've been especially thrilled to see our readership grow, both online and in print, around the world. The mission statement fronting our website is "Sharing Israel's biblical archaeology with the largest audience possible," and many of our friends and academic colleagues in Israel are surprised and delighted to learn of the far-flung places our work is reaching.

According to our analytics, our website has been visited from every country in the world but one (North Korea—perhaps unsurprisingly). We have even had a visitor from Antarctica! Since launching in 2022, ArmstrongInstitute.org has received 7.5 million views from 3.6 million unique users, with an average engagement time of close to four minutes per active user (a comparatively high figure in the industry). Weekly views have climbed steadily, from an average of 10,000 in 2022, when we launched our new website, to a weekly average of more than 40,000 this year. Users from the United States naturally lead the pack, followed in the top 10 by Israel, the United Kingdom, Canada, Australia, India, Brazil, South Africa, the Philippines and Indonesia. Among languages, English naturally comes first, followed by Spanish, Hebrew, Portuguese, German, French, Dutch, Indonesian, Russian and Arabic.

As for our print magazine, our subscriber numbers are modest, but they have grown steadily to a current total of about 14,000. (As with our website, this



Circulation of *Watch Jerusalem* **and** *Let the Stones Speak*

Since 2020, our circulation has increased from ***1,000 to 14,000.***



Let the Stones Speak *has reached subscribers in* ***nearly 130 countries.***

We thank all of our readers and viewers for their support, and we look forward to what the next decade brings!

growth has not *yet* been fueled by any substantial paid advertising but rather by word of mouth and organic interest.) Altogether, more than 236,000 copies of *Let the Stones Speak,* across 29 issues, have been shipped to subscribers in nearly 130 countries. They have reached large nations like the United States, Canada, Russia, China and Brazil, and some of the world's smallest, like Mauritius, Bermuda, Saint Kitts and Nevis, the Solomon Islands and the Bahamas. They have gone to Albania and Estonia in Europe, Haiti and Belize in the Americas, Kuwait and Iran in the Middle East, Togo and Lesotho in Africa, Nepal and Vietnam in Asia, Micronesia and Papua New Guinea in the Pacific, and Iceland and the Faroe Islands in the North Atlantic. Our subscribership covers just about every nation in North and South America, nearly every nation in Europe, and many in Africa, Asia and Oceania.

On the video front, our *Let the Stones Speak* YouTube channel continues to grow. We have produced nearly 150 videos and almost 30 shorts, which together have drawn close to 5 million views. Our most popular video has reached 700,000 views, and our channel now has nearly 55,000 subscribers. It's a far cry from our first full year on the channel in 2022, when we had a total of 60,000 views, 2,000 subscribers and the rare "excitement" of a video reaching 10,000 views!

Again, we've done all this with practically no advertising. In a publishing and online world that is incredibly noisy and saturated with virtually infinite distractions and products, we feel it's not bad for a small team of dedicated researchers, writers and artists!

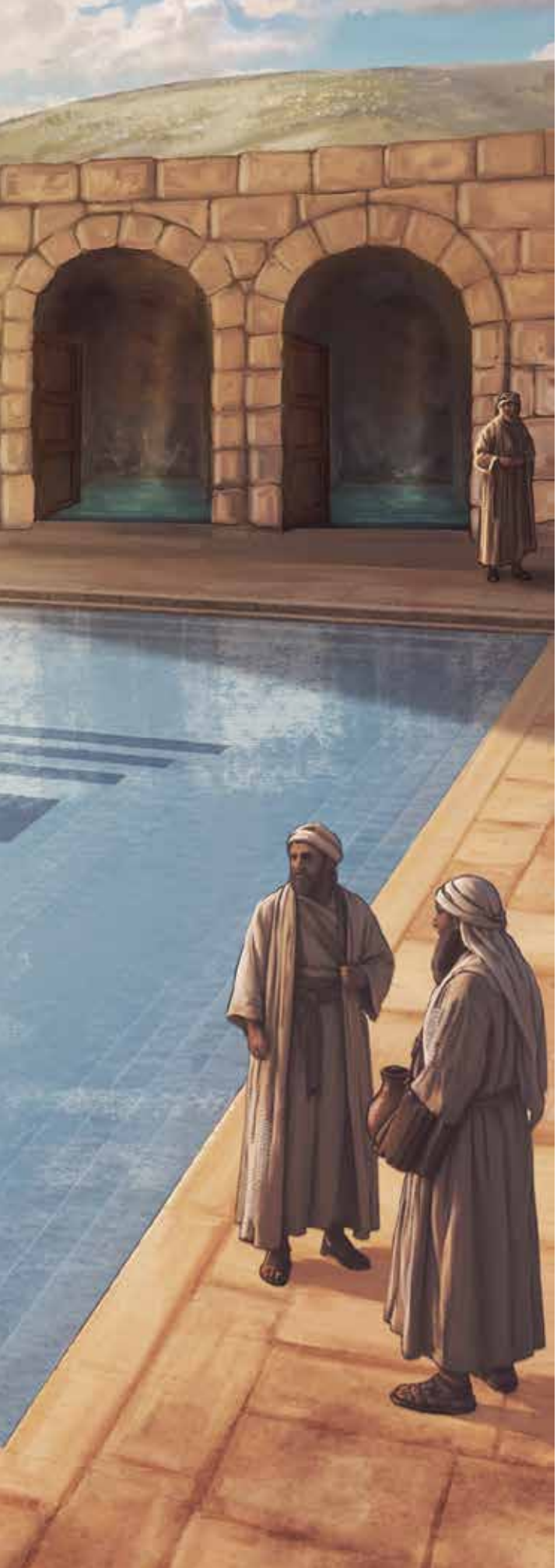
Looking back over the past decade or two, from the renewed excavations in Jerusalem to a modest beginning with a series of archaeology articles on a shared news-analysis website, Dr. Mazar's "prophecy" has truly come to pass: We do indeed have a burgeoning institute of archaeology. We thank all our readers and viewers for their support, and we look forward to what the next decade brings! ■



Unveiling Jerusalem's HOUSE OF MIKVEHS

Five seasons, one breathtaking find: A Second Temple Period purification complex emerges on the Ophel. BY CHRISTOPHER EAMES

EMMA MOODY/ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY



Introducing the "House of Mikvehs"—Hebrew, *Beit haMikvaot.* That's the term being applied to our monumental ritual purification complex discovered on the eastern side of Jerusalem's Ophel ridge, adjacent to the southern wall of the Temple Mount.

The House of Mikvehs is an impressive 2,000-year-old, monumental four-pool structure. The discovery is the culmination of a concentrated five-year archaeological project in partnership between Hebrew University of Jerusalem, the Armstrong Institute of Biblical Archaeology and Herbert W. Armstrong College, led by Hebrew University excavation codirectors professors Uzi Leibner and Orit Peleg-Barkat.

Information about this structure has been revealed in dribs and drabs in our blogs, magazines and interviews over the past five seasons of excavation. Finally, this September, following the conclusion of our last season of excavation in this area, the long-awaited press release hit the newswires: "Monumental Second Temple Period Purification Complex Uncovered at the Foot of the Temple Mount in the Old City of Jerusalem."

Responding to the release, Prof. Yonatan Adler—an expert in the origins of Judaism and this period in particular—posted on X: "This is actually quite an interesting discovery. We've already known of several ritual immersion pools scattered throughout the area south and west of the Temple Mount. … But here, for the first time, we appear to have a well-planned purification center, with several pools designed for organized, large-scale ritual immersion. … [W]hile it is true that we find ritual immersion pools everywhere we look, it makes perfect sense that special accommodations would have been provided at the entrance to the temple" (September 24).

In this article, I'll explain this remarkable new discovery that has experts in the field talking—including many additional details and specifics you *won't* have seen from the news reports commenting on it. Many of these details make the complex all the more remarkable—coming to you straight from the source, as one of the area supervisors that worked on the excavation. We'll also bring you up to speed on the more than 50-year(!) archaeological journey that led to this moment—and where we're going from here, following the conclusion of this project.

The Brass Tacks of the Building

In its most basic outline, the House of Mikvehs is a 280-square-meter (3,000-square-foot) complex dating to the early first century C.E. It consists of a large four-room structure on the northwest, fronted by a fine ashlar facade and a large four-sided multistepped outer pool measuring nearly 12 by 10 meters (40 by 33 feet) on the southeast. The complex is oriented in an ordinal direction (at a 45-degree angle to the Temple Mount)—facing southeast. The main pool, partially exposed since the 1970s, is iconic—few such immersion pools, stepped on all sides, have been found in Jerusalem. The only other examples include the (arguably more rudimentary) four-sided stepped pool found within the Jewish Quarter of the Old City and a much smaller four-sided stepped pool adjacent to Wilson's Arch. The Ophel pool therefore represents an impressive and unique structure situated at the foot of the Temple Mount—one of only three such known structures in the area (and in my biased opinion, the best).



The Ophel pool, as exposed in the 1970s

Let's begin with an overview of the four-room structure. This structure comprised Area D of the Ophel excavations, supervised by Amir Cohen-Klonymous. (The four-sided pool was later separately designated Area P, supervised by Akiva Goldenhersh.) The four-room Area D building was built of very well-dressed ashlar stones and originally supported impressive vaulted ceilings arching over three of the four rooms. Only traces of the arches can be seen for two of the rooms. The northernmost room, however, preserves the full height of its vaulted ceiling intact, with a floor-to-ceiling height of 4.2 meters (14 feet)!

Codirector Professor Leibner calls this room the "crown jewel" of the site, a "rare example in Jerusalem of a Second Temple Period structure preserved from floor to ceiling."

ISRAEL EXCAVATIONS, PHOTOGRAPHER JÖRG ZINK, N.D. EVANGELISCHES ARCHIV BADEN UND WÜRTTEMBERG



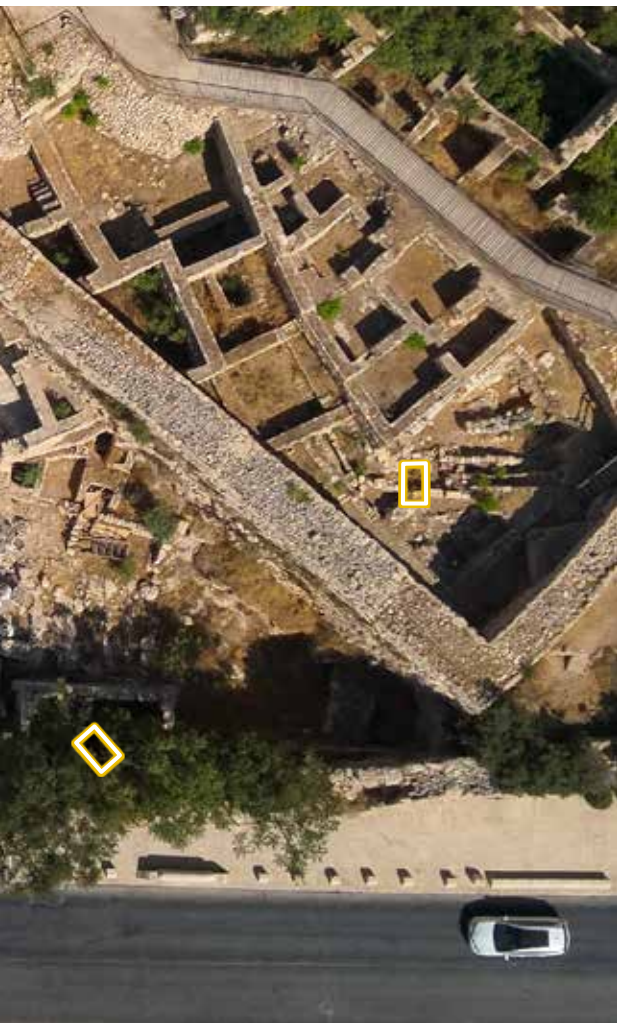
Locations of stepped pools discovered on the eastern Ophel (some having been excavated away). The "House of Mikvehs" is in the center.

What is the purpose for each of the rooms? For now, we don't understand the purpose of the southernmost ancillary room. There is some indication it may have served as a dressing room; we are still studying it to determine its exact nature. As for the three other rooms, the nature of the descending plastered steps in each makes it clear these were *mikvehs,* baths for ritual purification (hence the name, House of Mikvehs).

For that matter, the four-sided pool fronting the structure likely constituted a mikveh too—although there is some debate on this matter, as articulated in Asher Grossberg's "The Large Ophel Pool and the Question of Its Use as a Ritual Bath (*Mikveh*)" in Eilat Mazar's 2018 publication *The Ophel Excavations to the South of the Temple Mount 2009–2013: Final Reports, Vol. II*. Questions about the nature of its function concern matters such as public decency in using such a large and open pool for ritual purification, which would typically be performed in the nude. An interesting alternative proposition is that the large pool was still used for purification—but perhaps instead, for large ritual objects or utensils.

Of course, the four rooms and four-sided pool of *Beit haMikvaot* merely represent the core of the complex. It is built together with and abutted by several peripheral structures, including an unusual plastered installation on its southwest side (perhaps for linen-washing), and with a later addition of a narrow fifth pool on its northeastern side. In fact, these five pools represent only a *fraction* of the Second Temple Period pools discovered along this narrow eastern band of the Ophel: Within a wider 1,600-square-meter area, there are at least *18* ritual immersion pools, revealed variously over the decades in this area during the excavations of Prof. Benjamin Mazar, Dr. Eilat Mazar, Prof. Uzi Leibner, Prof. Orit Peleg-Barkat and Prof. Yosef Garfinkel (see below for a map of these pools).

Together, these pools were part of the massive, industrial scale of purification during the late Second Temple Period, particularly during the three pilgrimage periods of the year.



AERIAL PHOTO: EMIL SHUKOV

Pilgrim, How You Journey

Deuteronomy 16:16 records the following mandate: "Three times in a year shall all thy males appear before the Lord thy God in the place which He shall choose; on the feast of unleavened bread, and on the feast of weeks, and on the feast of tabernacles ...." By the first century C.E., the number of pilgrims arriving in Jerusalem, each with their own purification needs, was *vast.*

The contemporaneous Jewish historian Josephus describes the pilgrimage scene at the cusp of the Great Jewish Revolt (66–70 C.E.), calculating the number of individuals flooding the city for Passover at a whopping 2.7 million (*The Jewish War,* 6.9.3). Most scholars consider this figure an overestimate (and see logical problems in Josephus's own calculations in order to arrive at this figure). Yet the point is aptly made that whatever the true number, Jerusalem would have been visited by staggering numbers of pilgrims traveling for religious observances, requiring dedicated infrastructure to handle their various needs, including purification.

This explains the high number of ritual baths within this relatively small zip code of the eastern Ophel.

While the main House of Mikvehs clearly represents a facility dedicated to ritual purification, we still don't know who exactly used the baths. It's possible the building was intended for higher society or perhaps even temple workers themselves, given the especially fine construction and proximity to the location of the temple.

Broadly speaking, the building is contemporaneous with the setting of the New Testament. The structure certainly would have been familiar to (if not even used by) certain individuals described in the Gospels.




1

The book of John, for example, describes the passage of pilgrims to Jerusalem for Passover, including their purification: "And the Jews' passover was nigh at hand: and many went out of the country up to Jerusalem before the passover, to purify themselves" (John 11:55). The book of Acts describes the Apostle Paul purifying himself with others at a facility near the temple: "Then Paul took the men, and the next day purifying himself with them entered into the temple, to signify the accomplishment of the days of purification, until that an offering should be offered for every one of them" (Acts 21:26; KJV). Did the Apostle Paul purify himself in one of our baths? One can't help but wonder. It is possible.

Living Water

When you visit the House of Mikvehs and see all the baths, one question inevitably comes to mind: Where did the water come from? Jewish texts outline very specific and fundamental rules and regulations that developed concerning ritual purification (see article, page 20). One of the main rules required pilgrims to be purified in *mayim haim,* or "living water." This is water that flowed into the pool via a conduit or rain, as opposed to the pool being manually filled with water from a vessel.

Much of Jerusalem's water during the late Second Temple Period arrived via a major aqueduct system intersecting at the "Solomon's Pools" collection point just south of Bethlehem. Two main aqueducts fed water into Solomon's Pools: the colossal 39-kilometer-long (24-mile) Arrub aqueduct and the 4-kilometer-long (2.5-mile) Wadi el-Biyar aqueduct—a watercourse that contains a notable length of tunnel 2.8 kilometers long (1.7 miles), "longer than any tunnel in the water supply system of ancient Rome," wrote David Deming ("The Aqueducts and Water Supply of Ancient Jerusalem," 2025).

From Solomon's Pools, two additional aqueducts brought water into Jerusalem: the 13-kilometer-long (8-mile) High Level aqueduct and the winding 21-kilometer-long (13-mile) Low Level aqueduct. These sources facilitated both "basic human needs such as drinking, bathing and washing," as well as water "needed for ritual bathing and cleansing the areas where animal sacrifices were conducted. … [S]ignificant amounts of extra water would have been necessary during Jewish festivals when thousands of pilgrims crowded into the city," stated Deming.

David Amit and Shimon Gibson aptly describe this series of first-century aqueducts and pools as a "massive and awe-inspiring hydrological project" ("Water to Jerusalem: the Route and Date of the Upper and Lower Level Aqueducts," 2014).

Water would have likely entered our Ophel complex via a branch from this lengthy watercourse, cycling

MAP © MAPBOX © OPENSTREETMAP © MAXAR







1 Remains of the earlier, first-century B.C.E. mikveh 2 View of outer portion of the drainage channel 3 Cutaway of the four-sided Ophel pool, revealing two phases of construction 4 A Doric pillar capital

into the facility as needed. There are a couple of points on the northern end of *Beit haMikvaot* in which water evidently entered and was guided around the facility, including a drain-fed ceiling aperture at the top of the complete vault and a mid-level, wall-mounted feeder channel within one of the middle rooms.

How the water entered our facility is one thing. How the water *left* it is quite another—and one of the most unique features of our site. What makes *Beit haMikvaot* stand out is not just the finery of the standalone complex—it's the unique and complex *drainage system* that supports it.

Welcome to My Area

I had the privilege of supervising Area D1, the subterranean drainage system below the House of Mikvehs. (Actually, Area D1 later expanded to include a much larger outer northeastern area—nevertheless, it started out as the tunnel system directly below the Area D structure, hence the designation D1.)

It is relatively unusual for ancient mikvehs to have drains. So rare, in fact, that this has led to some debate about whether an ancient stepped pool with a drain even qualifies as a mikveh. Turns out it does—although examples are rare. The four pools of *Beit haMikvaot* are *all* interconnected by an impressive, *walkable* drainage system—and not only that, but the overall plan of the aboveground superstructure is also intrinsic to it, built upon the carefully designed foundation that the subterranean system provides.

The full length of the drainage system underneath *Beit haMikvaot* and descending to its east spans roughly *70 meters,* taking water from each of the pools out of the complex and draining it toward the Kidron Valley. (We

AUBREY MERCHAD/ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY (6); AERIAL PHOTO: EMIL SHOHOV



Plan of the Area D1 drainage channel

lose track of the drainage system as it continues southeast outside of the ancient city walls and under the modern Ophel Road.) Most of the drainage system is relatively narrow, at little more than half a meter wide. Yet much of it is impressively tall and walkable, with walls well over 2 meters high—even featuring a couple of arches—that in turn supported the House of Mikvehs' facade and superstructure. This unique drainage system would have allowed for regular water cycling through the House of Mikvehs, likewise pointing to a structure designed to facilitate frequent and sustained, high-capacity use.

Within the drainage system we discovered three levels of plaster floor surfacing—an original floor level to the drain, followed by two later resurfacings before the building fell out of use. Based on numismatic finds (coins) from the earliest plastering and the fact that this drainage system was integral to the main structure above (thus in turn providing a date for the overall building), we can date the construction of the House of Mikvehs to somewhere in the very early years of the first century C.E. This was toward the end of the reign of the first Roman emperor Augustus (r. Jan. 16, 27 B.C.E. to Aug. 19, 14 C.E.). This was also during the initial period in which Judea and Jerusalem came under direct Roman control through prefects, after Herod Archelaus's deposition in 6 C.E. (Herod Archelaus was a son and successor of Herod the Great—both of whom feature in the New Testament account.)

Following an intermediary plastering of the building's drainage system, the final plastered phase dated to sometime within the Great Revolt (66–70 C.E.), prior to the city falling to the Romans during the siege of Jerusalem. And indeed, throughout the excavation areas, we found signs of that watershed event in the history of Jerusalem and Judaism—the destruction of the city and the temple in 70 C.E. Dozens of revolt coins were discovered, along with piles of ash and debris—the walls and arches of the structure having collapsed in the conflagration.

Before the Bathhouse—and After

As significant and impressive as the House of Mikvehs is, it is not the only remarkable building in this area. It was in fact preceded by *another* large mikveh structure, cut through by the main monumental facility which was built atop of it. This even earlier mikveh structure was built of even finer ashlar walls and included nine preserved steps and a basin carved *entirely* from bedrock, with remaining walls preserved to an extraordinary height of up to 3.2 meters. The dating of this earlier mikveh is less certain. We continue to try to determine a date based on plaster samples. Nevertheless, we know it dates to at least the first century B.C.E., if not earlier.

Thus far we have only covered the later Second Temple Period structures in this area. These were built both atop of and adjacent to remains of an earlier structure that dated to the First Temple Period. This









1 Emma uncovers part of a Second Temple Period ceiling panel. **2** Byzantine period bone distaff **3** Iron Age horse figurine head **4** Bronze ring **5** Roman Tenth Legion tile **6** Herodian table edge fragment **7** Babylonian arrowhead **8** Byzantine bone hairpin fragment **9** Byzantine candlestick oil lamp

northeastern First Temple Period structure was excavated largely in 2012 by Dr. Eilat Mazar, yielding the famous Ophel Pithos Inscription, and was a structure probed further during our 2026 season, revealing a partial continuation of First Temple Period walls, floors and finds—all to be published in due course.

On the other side of the chronological spectrum, our Second Temple Period structure was *post*-dated by a large Byzantine neighborhood (circa fourth to seventh centuries C.E.) that developed in this area. These Byzantine structures largely covered over and obscured those of the Second Temple Period, in some cases preserving them (such as the complete vaulted room), while in other cases reincorporating part of the earlier House of Mikvehs for later use—namely, the four-sided pool. A probe excavation revealed that the pool had two main phases—the earlier, original Second Temple Period one being wider—and that this large pool had been slightly downsized and adapted to continue functioning during the Byzantine Period.

Treasure Trove

Besides the main structures themselves, the individual finds across the entire excavation area from all periods have been impressive. These include well over a thousand different coins, including rare examples, such as a silver half-shekel from Year Three of the Great Revolt and a silver tetradrachm from the Hellenistic Period; First Temple Period bullae; impressive ornate Second Temple Period architectural fragments; a large trove of ornate bone objects from a Byzantine workshop; hundreds of oil lamps and oil lamp fragments; dozens of First Temple Period figurine fragments; hundreds of Second Temple Period stone vessel fragments; weapons of war, including various projectiles—from a Babylonian arrowhead of the First Temple Period destruction of Jerusalem, to an ornate Hellenistic Period lead slingstone featuring Zeus's winged thunderbolt symbol, to a massive ballista stone; and numerous vessels and vessel fragments all the way from the Bronze Age (early second millennium B.C.E.) to the Early Islamic Period (late first millennium C.E.). All this, just from our latest concentrated five-year effort in this area.

But it's far from our only effort in this area unveiling *Beit haMikvaot* and its surrounds—nor is it our last.

Excavations Past, Present and Future

The discovery of this complex is a story in and of itself—and it's hardly limited to our latest five-season stint, from 2022 to 2026.

The main four-sided outer pool actually began to be revealed in the early 1970s, during excavations led by the famous Hebrew University archaeologist Prof. Benjamin Mazar, in partnership with our namesake Herbert W. Armstrong's Ambassador College. Ambassador sent hundreds of students to excavate the Ophel over a series of summers from 1969 to 1976—part of an "iron bridge" partnership between Hebrew University

SEE **MIKVEHS** PAGE 18

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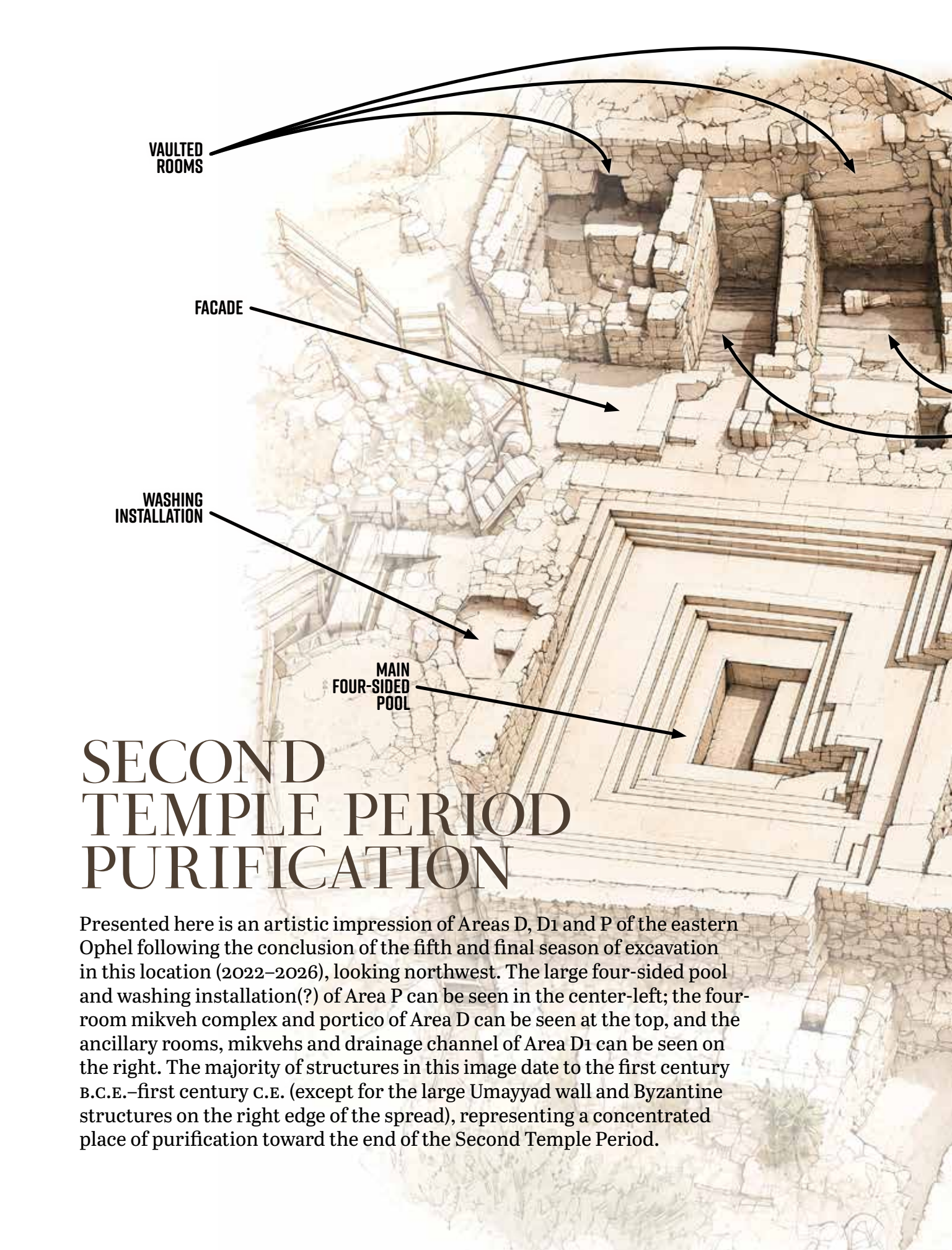



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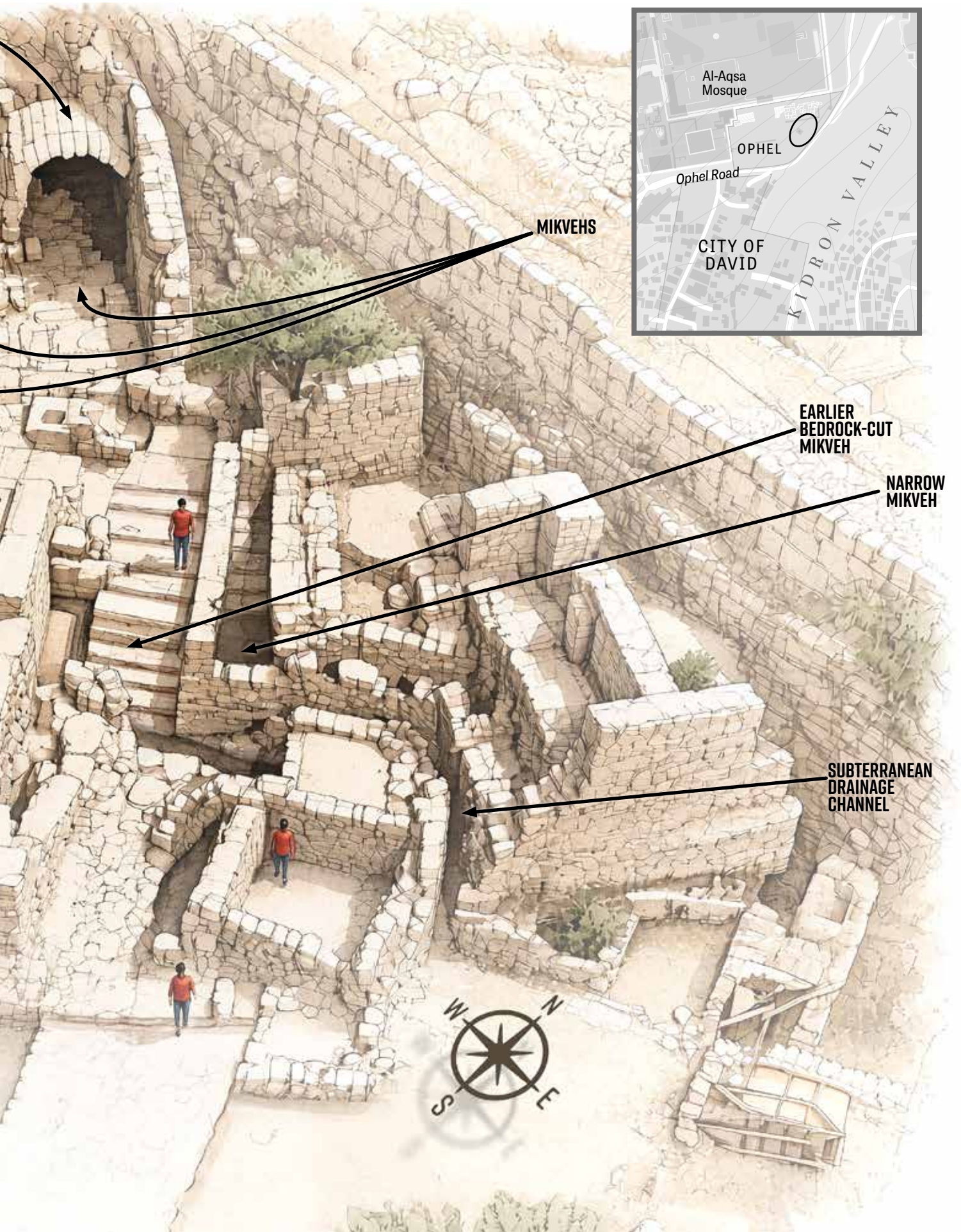

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SECOND TEMPLE PERIOD PURIFICATION

Presented here is an artistic impression of Areas D, D1 and P of the eastern Ophel following the conclusion of the fifth and final season of excavation in this location (2022–2026), looking northwest. The large four-sided pool and washing installation(?) of Area P can be seen in the center-left; the four-room mikveh complex and portico of Area D can be seen at the top, and the ancillary rooms, mikvehs and drainage channel of Area D1 can be seen on the right. The majority of structures in this image date to the first century B.C.E.–first century C.E. (except for the large Umayyad wall and Byzantine structures on the right edge of the spread), representing a concentrated place of purification toward the end of the Second Temple Period.


Al-Aqsa Mosque
OPHEL
Ophel Road
CITY OF DAVID
KIDRON VALLEY
MIKVEHS
EARLIER BEDROCK-CUT MIKVEH
NARROW MIKVEH
SUBTERRANEAN DRAINAGE CHANNEL
N
E
S
W

MIKVEHS FROM PAGE 15

and Armstrong that still continues to this day (see *ArmstrongInstitute.org/912*).

Part of the four-room complex was later uncovered during excavations in 2013 and 2018 led by the late Hebrew University archaeologist Dr. Eilat Mazar (granddaughter of Benjamin Mazar) and supported by students and staff of Herbert W. Armstrong College, directed by chancellor Gerald Flurry.

After Dr. Mazar died in 2021, my colleague Brent Nagtegaal and I went to the Ophel site with Prof. Uzi Leibner to see if he would be interested in continuing excavations in the area. After observing some of the remarkable preserved Second Temple Period remains edging out from underneath the upper Byzantine structures, he was all in—and the summer of 2022 began the first of five seasons of concentrated excavation in partnership between Hebrew University, Armstrong College and the Armstrong Institute of Biblical Archaeology. From the 2023 season onward, Professor Leibner was joined by codirector Prof. Orit Peleg-Barkat. Despite the Oct. 7, 2023, massacre and Israel's ongoing state of war, excavations continued unabated year by year, with the fifth and final season of the project concluding this summer. (Detailed picture blogs for each year of our excavations can be found on the Excavations tab of our website, *ArmstrongInstitute.org*.)


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With this phase of excavations in this particular area over, the fun part has ended—now the drudgery begins, with the exhaustive research and publishing of the many finds spearheaded by professors Leibner and Peleg-Barkat.

Yet for us, excavations are not over: The month following the conclusion of excavations in areas D, D1 and P, the Armstrong team began the first of a new series of excavations due northeast of *Beit haMikvaot*—adjacent to the southeast corner of the Temple Mount, in a location called Area E. This new excavation is being led by Hebrew University's Prof. Yosef Garfinkel. Once again, we are blogging our progress, and our digs in this area can likewise be viewed on the *ArmstrongInstitute.org* Excavations tab.

As for *Beit haMikvaot*? Leibner and Peleg-Barkat sum it up this way: "A monumental ashlar structure devoted entirely to ritual purification, situated at the foot of the Temple Mount and near one of its gates, is a truly unparalleled phenomenon. The complex goes to the heart of our research into the archaeology of Second Temple Period pilgrimage: how the area immediately south of the Temple Mount was designed to accommodate the many pilgrims who came to Jerusalem to visit the temple, and what activities and rituals took place near its gates." ■





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1 Azariah stands in front of the complete vault. **2** Lara reveals a 2,000-year-old manhole. **3** Iron Age bead **4** Decorated bronze object **5** Iron Age loom weight **6** Philistine potsherd **7** Judean Pillar Figurine bust **8** Iron Age cooking vessel **9** Pottery handle **10** Workers clean the site at the end of the 2026 season. **11** 70 C.E. collapse atop mikveh steps **12** Worked astragal (knuckle bone)



What Is a Mikveh?

An overview of these iconic and ancient Jewish installations

MICAH VAN HALTEREN

A *MIKVEH* (PLURAL, *MIKVAOT*) IS A JEWISH RITUAL immersion bath used from ancient to modern times. Mikvehs have been built in many different shapes and sizes but share certain common elements, with prerequisites that gradually developed over time.

Anciently, Jews in Israel began constructing typical plastered, stepped mikvehs around the late second or early first century B.C.E., at the end of the Hasmonean Period. However, most of these ritual baths are known from the Herodian Period (circa 40 B.C.E.–70 C.E.). Because mikvehs are used for Jewish ritual purification purposes, the discovery of such a bath at a site constitutes key evidence of Jewish settlement (besides certain particular examples from the Samaritan community). In contrast, the absence of a mikveh from these periods onwards is also often evidence of the absence of a Jewish population.

The first of these ancient pools to be identified as mikvehs were discovered in the 1960s, during Prof. Yigael Yadin's excavations at Masada. The discovery received much media attention and resulted in a lasting debate about the nature of the term *mikveh* and whether it should be applied to every similar stepped water installation.

Since then, hundreds of mikvehs have been found all over Israel, with more continuing to be found every year (including a multi-mikveh complex uncovered during our recent Ophel excavations—see page 8). In Jerusalem alone, nearly 200 of these ritual baths have been found so far.

With more mikvehs being discovered all the time, we are constantly gaining a better picture of both why and how they were used.

BRUNO BARRAL VIA WIKIMEDIA COMMONS

Biblical Beginnings

The emergence of these iconic stepped pools is often associated with an increased focus on ritual purity from the Hasmonean Period onward. One of the reasons so many mikvehs are found in Jerusalem and close to the temple at this time of sharply increasing pilgrimage is that a person needed to be ritually pure to enter the temple complex. The only way for a ritually impure person (*tum'ah*) to become pure (*taharah*) was to immerse himself. Likewise, certain types of vessels that had become impure could also be made pure in a mikveh.

Jewish ritual baths were not necessarily always known as *mikvaot.* Some scholars suggest other terms in use at the time, including *me'ara* ("cave") and *beit hatvila* ("house of immersion"). However, from at least the second century C.E. *mikveh* became the common term for these pools.

The practice of purification, however, goes back earlier—*much* earlier.

The practice of ritual purification in a "mikveh" has its roots in the Torah, although there is no mention of specific installations required for this purpose. Regulations regarding valid mikveh installations as we know them from the late second to first century B.C.E. onward developed during later periods.

The term *mikveh* is used several times in the Hebrew Bible and generally refers to a natural reservoir or "gathering" of water. In the creation account, it says God gave the name "seas" to "the gathering together [*mikveh*] of the waters" (Genesis 1:10). The same term is used in Isaiah 22:11 to refer to the "basin" to which King Hezekiah redirected the waters of the Gihon Spring—thus a collection point of naturally sourced water.

Numerous scriptures in the Torah mandate ritual purity through washings, including prescribing "clean" sources of water. An exemplar passage is Leviticus 11:36: "Nevertheless a fountain or a cistern wherein is a gathering [*mikveh*] of water shall be clean …." Various washings are prescribed for tabernacle (and subsequent temple) services, following certain illnesses and emissions, etc.

The much later writings of the talmudic sages expound upon biblical purity laws and their connection to the use of mikvehs. The Mishnaic tractate *Mikvaot* states that the highest degree of mikveh required living waters, "for in them there is immersion for *zavim* and sprinkling for *metzoraim,* and they are valid for the preparation of the *hatat* waters." *Zavim* were those that had an abnormal genital discharge (Leviticus 15:13), *metzoraim* refers to people with a certain skin disease (Leviticus 14), and the *hatat waters* were waters that the ashes of the red heifer offering were to be poured into (Numbers 19:9).

This concept of "living waters"—*mayim haim,* naturally sourced flowing water—is also mentioned in other places in the Hebrew Bible, such as Jeremiah 2:13, where God is represented as the fountain (or spring) of living waters.

There are also several references to living waters in the first-century C.E. setting of the New Testament—the key point in time in which the use of stepped purification baths explodes onto the scene. The Gospel of John contains several references to the importance of living water and ritual cleansing. John 7:37-38, for example, read: "In the last day, that great day of the feast, Jesus stood and cried, saying, If any man thirst, let him come unto me, and drink. He that believeth on me, as the scripture hath said, out of his belly shall flow rivers of *living water"* (King James Version). Additionally, after Jesus heals the blind man in John 9, he tells him, "Go, wash in the pool of Siloam" (verse 7; KJV), as according to Jewish law anyone infirm was also considered impure.

In addition to purifying *people,* the Torah contains several laws about purifying *vessels.* Unlike pottery, vessels made of wood, skin, leather or metal could be purified with water (e.g. Leviticus 11:32-33; 15:12; Numbers 31:19-23). Later injunctions ruled that vessels made of stone could not become impure, which is why we find a prevalence of stone vessels during the first centuries B.C.E.–C.E. (at the same time, the practice of building stepped mikvehs began to flourish). This is also reflected in the New Testament: "And there were set there six waterpots of stone, after the manner of the purifying of the Jews, containing two or three firkins apiece" (John 2:6; KJV).

Laws of the Mikveh

During these later periods, the laws surrounding mikvehs began to compound, with varying interpretations from Jewish religious leaders developing around what makes a mikveh valid for purification. Our main sources for the laws of the mikveh are the writings of the talmudic sages of the second century C.E. The tractate *Mikvaot* describes six degrees of ritual immersion pools with their specifications, each one "superior" to the next. The highest (sixth) degree mikveh was able to purify in all circumstances.

In a 2006 *Jerusalem Perspective* lecture, Prof. Ronny Reich—responsible for excavating dozens of mikvehs—summarized these laws into five requirements for a mikveh to be valid for all manners of ritual purification. The first requirement is that a mikveh must be filled with "living water" (*mayim haim*) as from a spring. This meant that the water could not be drawn by hand or moved in a vessel. It had to be "in the hand of heaven" and naturally flow into the pool without active human intervention.

Secondly, the mikveh had to be connected to the ground. That means it could not be a removable structure, like a standing bathtub. As such, many mikvehs are carved from bedrock, either in their entirety, or at least with the lowest step/basin carved into bedrock. The commonality of this practice has led some to assume that it was required for a mikveh to be carved into bedrock—however, several mikvehs have also now been discovered constructed on top of earthen fills, indicating this was also accepted in some cases.

Next, an important requirement for a mikveh was its volume. The minimum volume for a valid mikveh was 40 *seah.* The Mishnah, rather humorously, equates this volume with a certain number of eggs, stating: "The measure of the water of a mikveh (ritual bath) is 40 *seah* of well water, written in the Torah. And how many eggs is the measure of the mikveh? Five thousand seven hundred and sixty. Each *seah* is a hundred and forty-four eggs." Estimates of this volume have varied wildly among scholars, ranging from between 250 to 1,000 liters. Whatever the case, this mandate for a mikveh's minimum volume certainly had to do with allowing for the full body immersion (*tvilah*) required for purification.

Once a mikveh was filled with the required 40 *seah* of "living water," any amount of "impure" water (drawn with the hand) that touched it was ruled as automatically becoming purified and valid for use. For this reason, some mikvehs are found with an adjacent secondary pool, which became known as an *otzar* ("treasury") in medieval times. This secondary pool was always filled with living water, qualifying it as a valid mikveh and giving it the ability to purify impure water. If the water from the primary mikveh needed to be replaced, the bath could be filled with "impure" water drawn by the hand and then brought into contact with this *otzar* to make it pure.

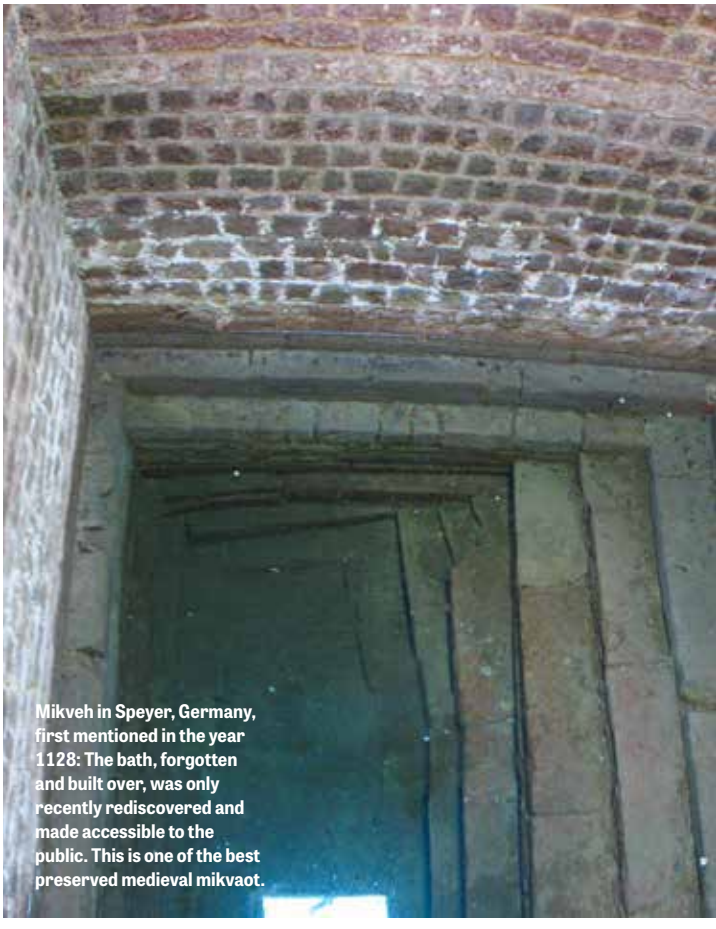
The fourth requirement was that the pool had to have a minimum depth of 3 cubits (135–150 centimeters).

Lastly, the mikveh had to be tightly plastered so that no water could seep from the pool. Although this requirement led some scholars to assume that a mikveh could not have a drain, the discovery of several mikvehs with a drainage system have upended this assumption (including those discovered in our excavations on the Ophel—page 8).

Variations

Not all mikveh installations were created equal. While the minimum requirement of the water in a ritual bath was specifically regulated, there was much variation in both the size and shape of the installation itself.

Some mikvehs were just large enough to fulfill the 40 *seah* requirement and were used by one person at a time, while others were enormous baths that could fit multiple people. One example of a large pool that was likely used as a ritual bath in the first century C.E. is the pool of Siloam mentioned in John 9.



Mikveh in Speyer, Germany, first mentioned in the year 1128: The bath, forgotten and built over, was only recently rediscovered and made accessible to the public. This is one of the best preserved medieval mikvaot.

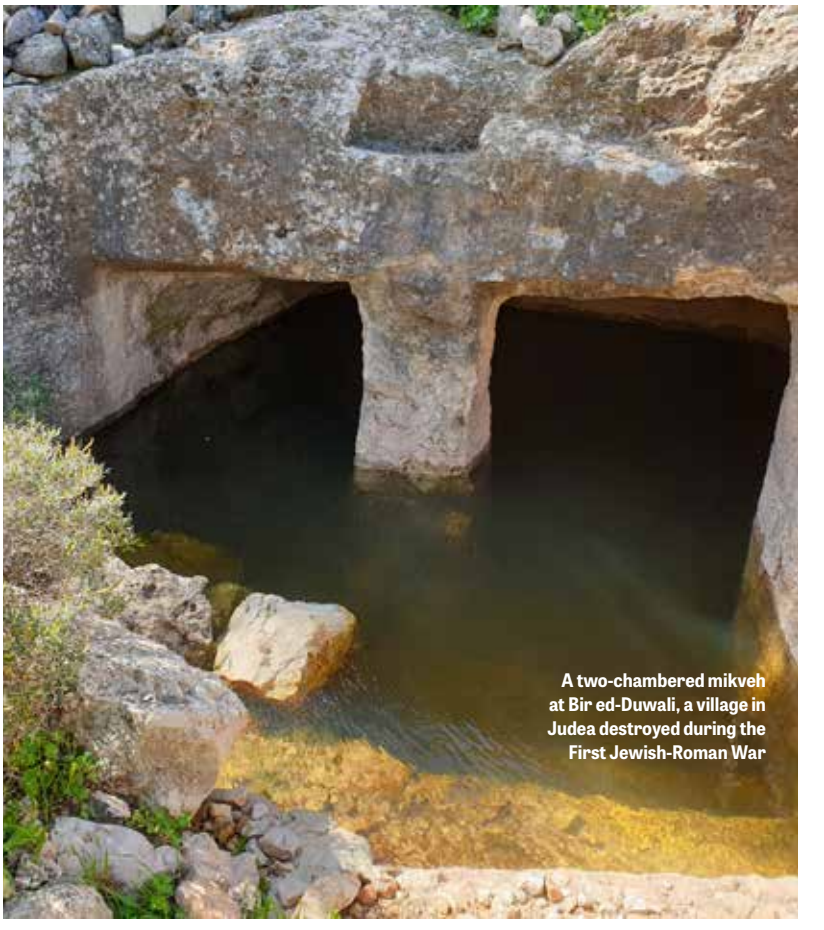
CHRIS 72 / WIKIMEDIA COMMONS

One problem with large public baths is that Jewish law required a person to immerse himself or herself nude. Perhaps tent-like structures provided required privacy in such cases. Some scholars have even suggested that some mikvehs could have served a dual purpose, being used for recreational purposes as well.

Some ritual baths had a secondary pool (*otzar*), while others were filled directly with living water by other means. Most common are the pools that have steps descending in a single direction, while other ritual baths had steps descending from two or all four sides.

Another variant feature is a low plastered wall separating the descent into the pool from the ascent out of it—the reason apparently being to enter from one side impure and to exit from the other side pure. On this, relating to pure/impure vessels, the Mishnaic tractate *Shekalim* says: "All vessels found in Jerusalem on the way going down to the place of immersion are unclean, [but those found] on the way going up [from the place of immersion] are clean; for the way down is not the same as the way up …." In similar form, certain mikvehs have been found with two entrances—one to enter and one to exit.





A two-chambered mikveh at Bir ed-Duwali, a village in Judea destroyed during the First Jewish-Roman War

Mikvehs have been discovered in a variety of settings, including next to tombs, wine and olive presses, public spaces and private homes. This makes sense in light of Jewish *halakhic* law, which required ritual purification after touching a dead body or before working with certain agricultural produce.

Ronny Reich's foundational 2013 work *Miqva'ot (Jewish Ritual Baths) in the Second Temple, Mishnaic and Talmudic Periods* established a corpus of all mikvehs that had been found at the time. In an article for *Biblical Archaeology Review,* "The Great Mikveh Debate," Reich suggested that all such aforementioned differences could "reflect the diversity of Jewish society in those days"—with certain religious factions establishing different requirements. (Such religious divides during the first century C.E. are famous from the New Testament account, especially between the Pharisees and Sadducees.)

Modern Mikvehs

After the destruction of the temple in 70 C.E. and the suppression of the Bar Kokhba Revolt in 135 C.E., many previously Jewish settlements (like Jerusalem, Masada and Jericho) lost their majority Jewish population. Practically all mikvehs at these settlements fell out of use.

However, more recent evidence shows that mikvehs at other settlements that retained a Jewish population, such as Sepphoris and Susiya, remained in use throughout the Roman and Byzantine periods. Furthermore, "[r]itual baths dating to the late Roman and Byzantine periods have been unearthed at Meiron, Khirbet Shema, Sasa, Horvat Kor, Horvat Hoquq, Meroth, Chorazin, Arbel, Horvat Parod, Khirbet Qana, Tiberias, Tel Yin'am, and En Rani," Yonatan Adler wrote in "The Observance of Ritual Purity After 70 C.E."

The following centuries feature a particular prevalence of mikvehs in Europe. The 12th-century C.E. Jewish scholar Maimonides wrote a compilation of the laws for his time concerning ritual baths. At times, the mikveh was considered so important that one was required in a community before a synagogue was constructed.

Today, the mikveh continues to be used in Judaism, such as by women prior to marriage, following menstruation or childbirth, and ritual immersion in a mikveh is still one of the requirements to become a Jewish convert in Orthodox and Conservative Judaism. This continuing practice, typically involving stepped pools, is one that would be immediately familiar to a Jew from Israel over 2,000 years ago—continuing a tradition of purification laws from over 3,000 years ago. ■

OVEENGLYNDUR VIA WIKIMEDIA COMMONS

Where Is Kadesh?

Can the biblical record clear any of the controversy surrounding the location of this prominent site in Israel's wanderings?

BY RYAN MALONE



View of Jabal Harun

BASHAR TABBAH VIA WIKIMEDIA COMMONS

When it comes to this famous location from the Hebrew Bible, archaeology hasn't actually been much help—at least for where conventional wisdom places it. "Kadesh," or "Kadesh-barnea" as it is later termed, is one of the key sites in biblical Israel's wanderings.

In the absence of any conclusive archaeological evidence, a bouquet of conjectures, theories and seemingly educated guesses have sprouted—some rooted in solid historical documentation and others tangled in circular logic.

Where archaeology can help is on a broader, more existential scale. Since it has continually offered further *credence and reliability* to the biblical record, it rightly points us to this document as a reputable historical testimony.

What if we leaned on *that* as a reliable, historical (even primary) source? Could we eliminate or recommend "Kadesh" candidates with any certainty?

What Was Once Believed

Centuries ago, Kadesh's location appears to have been largely agreed upon.

Some of the "evidence" related to the name of a famous Jordanian mountain just east of Israel's border, south of the Dead Sea. It is one of the highest peaks in the vicinity, higher than any elevation in southern Israel: *Jabal Harun*—Arabic for Mount of Aaron.

This is relevant to the Kadesh discussion because the Bible indicates Aaron died *near* Kadesh, specifically on "Mount Hor" (Numbers 20:22-29; 33:37-39). The mount in question is near Petra, Jordan—just over 3 miles from the famous Treasury edifice.

As to this site of Aaron's death, Flavius Josephus wrote in the late first century c.e.: "[W]hen he came to a place which the Arabians esteem their metropolis, which was formerly called Arce, but has now the name of Petra, at this place, which was encompassed with high mountains, Aaron went up one of them in the sight of the whole army, Moses having before told him that he was to die, for this place was over against them" (*Antiquities of the Jews,* 4.4.7).

A footnote to this passage by 18th-century translator William Whiston also

references Miriam's burial spot, which Numbers 20:1 puts IN Kadesh: "[H]er sepulchre is still extant near Petra, the old capital city of Arabia Petraea, at this day; as also that of Aaron, not far from the same place."

In his early-fourth-century C.E. work *Onomasticon,* Eusebius of Caesarea defined Kadesh Barnea as a "desert which extends to (the city of) Petra .... There Mariam went up and died, and there the doubting Moses struck the rock to give water to the thirsty people. The tomb of Mariam herself is pointed out there even now. There also Chodollagomor beat the chiefs of the Amalakites," referencing Genesis 14:1-7.

This volume defined Mount Hor as that "on which Aaron died near the city of Petra. There is now pointed out the rock which flowed for Moses (which Moses struck and gave water to the people)."

Later the same century, Jerome of Stridon's *Hebrew Questions on Genesis* comments on the Genesis 14:7 mention of Kadesh: "It is said by anticipation that it was afterwards so called. But it signifies the place at Petra, which is called the well of judgment because there God judged the people."

In 1993, a sixth-century C.E. trove was discovered, known as the *Petra Papyri,* including a document with the phrase: "The sacred house of our Lord the Saint High Priest Aaron." This inspired the Finnish Jabal Harun Project excavations several years later. In 1998, it uncovered a fifth-century C.E. Byzantine complex dedicated to the biblical figure's honor.

As for Petra proper, Eusebius noted that it was called "Rekem" by Assyrians (and the Nabataeans similarly referred to it as *Raqmu*). Josephus likewise wrote about a certain Rekem, a man "who was of the same name with a city, the chief and capital of all Arabia, which is till now so called, by the whole Arabian nation, *Arecem,* from the name of the king that built it: but is by the Greeks called *Petra*" (*Antiquities,* 4.7.1).

Archaeology may have provided another link here. A Nabataean inscription etched in the rock wall of Petra's Wadi Musa reading "Rekem" was photographed in 1976 by Kendall Down. Sadly, the inscription was buried in concrete in the mid-1990s when, ironically to support growing tourism traffic, the Jordanian government had a bridge built there.

One other locale and name to consider here is the Wadi Musa—a river valley named for Moses himself, as is the Ain Musa (spring of Moses), used by the Nabataeans to irrigate the Petra region. How exactly it came to bear Moses's name is not verifiable. It was definitely known as such at the time of the Crusades, hinged to the belief that this was where Moses struck a rock before water miraculously gushed out. The biblical record says this particular event occurred in Kadesh toward the end of the 40-year wandering (Numbers 20), and the rock Moses struck is interestingly designated, not as the usual *tzur,* but as *sela*—the Hebrew name for Petra.

Before bearing Moses's name, this river valley was referred to as *Gaia* (Eusebius, op cit), believed to be from the Hebrew *gai,* a common word for valley in the Hebrew Bible—specifically referring to a narrow gorge (in contrast to the word *emek*—a wider, flatter land area). *Gai* is undoubtedly a word that would describe this particular valley in Petra.



Nabataean inscription etched in the rock wall of Petra's Wadi Musa reading "Rekem," photographed in 1976

KENDALL DOWN

What Is Currently Believed

That may seem like a lot of evidence—at the very least evidence of a CONSENSUS among the ancients. Why did modern scholarship abandon the notion of Kadesh being in this neighborhood?

It seems reckless to abandon more ancient beliefs unless there is SOLID evidentiary reason to—especially since historians like Josephus, Eusebius and Jerome lived closer to the time of Israel's wanderings than we do. Sure, still quite far removed themselves, but it stands to reason that I would likely learn more about my great-great-grandparents by asking my grandparents, rather than by asking my parents—even if none of the lifetimes overlapped.

Nonetheless, let us honestly assess where conventional wisdom stands. Let us weigh it against the biblical record to see where it may or may not harmonize.

In the late 19th century, largely due to a piece by H. Clay Trumbull, Ain Qedeis was posited as the likely site of Kadesh. This is much farther west of the Petra region, in southern Israel, bordering the Sinai Peninsula.

Using similar linguistic logic defending *Jabal Harun* and *Wadi Musa,* this site's Arabic name literally means



Byzantine monastery at Jabal Harun

"Spring of Kadesh." This was based on Trumbull's own journeys through the area, as well as the experiences and writings of an earlier British theologian by the name of John Rowlands some 40 years prior.

In 1910, Nathaniel Schmidt wrote a paper in the *Journal of Biblical Literature* about his 1905 visit to the area. This opened the door to considering a tell, or mound, about 10 miles northwest called Tell el-Qudeirat as a likelier candidate for Kadesh. The plot twist here was that Schmidt *still believed* Kadesh to be in the *Petra* region.

But a few years later, famous British archaeologists C. L. Woolley and T. E. Lawrence ("Lawrence of Arabia") built on Schmidt's findings, dismissing his Petra conclusion and dubbing Tell el-Qudeirat the primary Kadesh candidate. Though they rejected Ain Qedeis as the center of Kadesh, they acknowledged it as part of a larger Kadesh "district." This represents the consensus today—that the two places were not competing sites but part of a larger region that suited the Israelites' entire encampment.

Since then, conventional wisdom cites their work, plus that of Rudolph Cohen in the late 1970s. More recently, David Ussishkin, Lily Singer-Avitz and Hershel Shanks published an article revisiting this identification in the September-October 2015 *Biblical Archaeology Review.*

What Does the Tell Tell?

Is there any archaeological basis here?

Conducted by Moshe Dothan in 1956, the first excavation of the tell was brief. He dated the Iron Age fortress ruins that Woolley and Lawrence had documented, putting them between the eighth and sixth centuries B.C.E.

In 1976, Cohen began excavating the site and explored earlier layers, showing the site's importance during the united monarchy. A 1981 article about his work there admitted: "Thus far our excavations have yielded nothing earlier than the 10th century B.C.—the time of King Solomon. How can we explain this? First of all, the identification of the site is not absolutely certain."

Cohen still believed this to be the site of Kadesh: "[A]t least for the present, we cannot be sure which theory explains the absence of archaeological remains from the time of Moses and the Exodus. Perhaps future excavations will give us the answer."

Cohen did find some scattered pieces of foreign pottery and Egyptian-style stamp seals. And Singer-Avitz later examined the raw data and pottery finds to conclude that these fragments were actually Qurayyah Painted Ware from the 12th–11th centuries B.C.E. ("Qurayyah" referring to its primary site of production in northwestern Saudi Arabia—sometimes called "Midianite ware.")

JONEKHEY VIA WIKIMEDIA COMMONS



The Ussishkin, Singer-Avitz and Shanks piece pointed to these findings as indication of a nomadic presence in the area—matching that of a wandering people who invariably would have acquired and traded goods along the way to Canaan. They conclude from this that this oasis is "the only suitable site in the vast, desolate and barren desert that could fit the biblical references."

Some of their arguments seem to be based on the logic that Israel *stayed* at Kadesh for 38 years, meaning such a vast number of people for that amount of time would have had some sort of archaeological footprint. But, as we'll see, that's not actually what the biblical record says.

They also wrote: "There is no viable alternative to this site." Our readers will be well familiar with the fault in this logic. To say, "It doesn't exist because we haven't found it yet" doesn't hold much water in biblical archaeology these days.

Even IF this logic were sound we're still left with the issue of TIMING. As we have consistently established with regard to the timing of Israel's wanderings, even the earliest 12th-century B.C.E. Midianite potsherds are still much too late (see *ArmstrongInstitute.org/350*).

What the Bible Eliminates

Which hypothesis is correct? The two prevailing options are about 70 miles apart, a great distance in the ancient world. Some try to solve the disparity in the two consensuses by suggesting there were *two* Kadesh sites. But is this what the Bible indicates?

Let's look at the biblical record with a historical approach. What is certain and conclusive? What is vague? What is left to deduction? First, consider: Does the Bible *rule anything out?*

The main argument AGAINST Ain Qedeis and Tell el-Qudeirat is that—though outside Israel's *modern* borders—they are located WITHIN the borders allotted to ancient Israel after arriving in the Promised Land as described in Numbers 34 and Joshua 15. Both Numbers 34:4 and Joshua 15:3 specifically list these borders as going "TO Kadesh Barnea," per the original Hebrew—and quite literally "FROM *negev* TO Kadesh Barnea." This is ironically obscured in many translations, which make it seem like the borders go SOUTH OF Kadesh.

Consider God's instruction given in two separate instances WHILE THE ISRAELITES WERE IN KADESH.

First, shortly after the spies returned to Kadesh after scouting the land, God cursed Israel with 40 years of wandering the wilderness. "Surely ye shall not come into the land, concerning which I lifted up My hand that I would make you dwell therein ..." (Numbers 14:30). Rather, their carcasses would "be consumed in the wilderness" (verse 33).

Second, toward the end of the 40-year period, God directly told Moses and Aaron *while in Kadesh:* "ye shall not bring this assembly into the land which I have given them" (Numbers 20:12). Later, to Aaron personally: "Aaron shall be gathered unto his people; for he shall not enter into the land which I have given unto the children of Israel ..." (verse 24). These would be incredibly contradictory statements to make if all those prohibited from entering the Promised Land were *actually in it already.*

The Ain Qedeis region and Tell el-Qudeirat site cannot really even be considered border areas of the Promised Land, since they are about *17 miles* within the original allotment.

Which Wilderness?

What are the clues in the biblical record about Kadesh's location?

Moses didn't leave us a map, but the various terms peppered throughout the Hebrew Bible, along with some benchmark locations, give guidance. We know where Egypt is, as well as the Red Sea, which forks at



the Sinai Peninsula. Its eastern fork leads us into the famous Red Sea port of Ezion-geber—close to modern-day Eilat.

Here is a brief overview: Israel approached the wilderness of *Shur* shortly after leaving Egypt (Exodus 15:22; see also Genesis 25:18). Next was the wilderness of *Sin,* before heading to the wilderness of *Sinai,* where Israel spent nearly a full year (Exodus 19:1—encamping at Sinai in the third month after leaving Egypt; Numbers 10:11—departing Sinai the 20th day of the second month of the second year). After this, the pillar cloud headed to the wilderness of *Paran.* It's clear from Numbers 10:12 that these are two mutually exclusive locations. (Paran is also distinct from Midian, per 1 Kings 11:18.)

Kadesh was in this neighborhood. Numbers 13:3 says the spies were sent "from the wilderness of Paran," while Deuteronomy 9:23 says they were sent "from Kadesh-barnea" (see also Numbers 32:8; Joshua 14:6-7). Numbers 13:26 says the spies returned "unto the wilderness of Paran, to Kadesh." We also know that going to the Promised Land from Kadesh was an *ascent* for the spies (Numbers 13:17, 21)—entering somewhere in the "south," literally *negev.*

In Genesis 14, Paran (technically "El-paran") is mentioned in the vicinity of Kadesh (verses 6-7). Deuteronomy 33:2 mentions a "mount Paran" in the context of Seir—an Edomite region (Genesis 32:4; 36:8; Deuteronomy 2:22). Coming from Egypt and Mount Sinai, one had to go in the direction of Seir to get to Kadesh (Deuteronomy 1:2).

Speaking of the time near the end of their wanderings, Numbers 20 says: "Israel … came into the wilderness of *Zin* in the first month; and the people abode in Kadesh …" (verse 1). Numbers 27:14 also mentions "the waters of Meribath-kadesh in the wilderness of Zin."

So is it the wilderness of Paran or Zin? These are obviously not mutually exclusive deserts—rather more likely one is a smaller region of the other, larger one; alternatively perhaps the 38-year gap between visits explains the shift in terminology. Nevertheless, both usages of Paran and Zin ensure we know Kadesh is not in the Sinai wilderness.

Contradictions?

At first glance, there seem to be some discrepancies between the detailed narrative of Numbers 10-14 and the overview provided later in Numbers 33.

For instance, Numbers 12:16 takes Israel from Hazeroth to the wilderness of Paran. Numbers 33:18-36 take them to MANY places before Kadesh is mentioned: Rithmah, Rimmon-perez, Libnah, Rissah, Kehelah, Mount Shepher, Haradah, Makheloth, Tahath, Terah, Mithkah, Hashmonah, Moseroth, Bene-jaakan, Hor-haggidgad, Jotbah, Abronah and Ezion-geber, after which they "pitched in the wilderness of Zin—the same is Kadesh" (verse 36). But this Kadesh visit specifically

HOW KADESH GOT ITS NAME

THE WORD *KADESH* COMES from *kadash,* meaning "to be sanctified." Moses may have given away exactly how this place received its name in Numbers 20. This took place shortly after Miriam died in that area, during Israel's final year of wandering.

Verse 13 reads: "These are the waters of Meribah, where the children of Israel *strove* with the Lord, and He was *sanctified* in them." The explanatory phrase uses both the verb for *strove,* which is where *Meribah* comes from, and the word *kadash.*

Numbers 27:14 refers back to this, using both verbs again before putting them in name form at the end of the verse: "… ye rebelled against My commandment in the wilderness of Zin, in the *strife* of the congregation, to *sanctify* Me at the waters before their eyes.'—These are the waters of Meribath-kadesh in the wilderness of Zin."

This was the defining moment for this place—where Moses and Aaron were explicitly told they would not enter the Promised Land. In Deuteronomy 32:51, Moses himself is told: "Because ye trespassed against Me in the midst of the children of Israel at the waters of *Meribath-kadesh,* in the wilderness of Zin; because ye *sanctified* Me not in the midst of the children of Israel."

Given the tradition of naming places in the wilderness after key moments there (see Numbers 11:3, 34), could this have been the actual moment where Kadesh was first designated as such? Is this why in the first reference to a place called by another name (Genesis 14:7), the author clarifies that it's what we *now* call Kadesh? This way, he can continue to use the long-standing "Kadesh" in places like Genesis 16:14 and Genesis 20:1.

Besides mentions found in the Torah, the only other biblical personalities to use this geographic term are Jephthah (Judges 11:16-17), David (Psalm 29:8) and Ezekiel—who, in both his references,

describes the end of the wandering, just before Aaron's death in Mount Hor (verse 37).

Solving this seeming contradiction helps us identify where Kadesh is.

We can harmonize this with Moses's "sermon" in Deuteronomy 10:6, where he reviewed how they "... journeyed FROM *Beeroth-benejaakan* TO *Moserah;* there Aaron died, and there he was buried ...."

All biblical accounts are clear: Israel was in Place A, and then went to Place B where Aaron died. Place A is usually called "Kadesh" and Place B "Hor," but here they are called the "[wells of]-benejaakan" and then "Moseroth."

Thus Bene-jaakan appears to be yet *another* term for Kadesh.

This helps us understand why these two locations are in reverse order as in Numbers 33:31—because that was the path *earlier* in the wanderings, when they came to Kadesh initially.

Per Deuteronomy 10:7, a couple of sites were retraced after Aaron's death, which confuses some, but this simply reinforces a diversion they had to make, due to restrictions in place by the king of Edom.

Bene-jaaken literally means "sons of Jaakan." 1 Chronicles 1:38-42 say Jaakan was a grandson of Seir—the same lineage found in Genesis 36:20-27, where he is called "Akan." Moses said in Deuteronomy 2:1 that "we compassed mount Seir many days."

Numbers 33:23 tells us they went by "mount Shepher" on the way to this region ascribed to the sons of Jaakan—believed to be Jebel Shafeh, just south of the Wadi Musa area. (Others disagree, placing it deeper in the Sinai peninsula. But as we've established, Israel was outside of that area by this point.)

Leaving Kadesh

The Paran/Zin wilderness overlaps some with Edom. The overview account in Numbers 33:37 puts Mount Hor "in the edge of the land of Edom."

The Numbers 20 account is where Moses sends this message to the king of Edom: "And when we cried unto the Lord, He heard our voice, and sent an angel, and brought us forth out of Egypt; and, behold, we are in Kadesh, *a city in the uttermost of thy border"* (verse 16).

The Israelites had been in Edom's peripheral lands for quite some time (e.g. Ezion-geber is "in the land of Edom" per 1 Kings 9:26 and 2 Chronicles 8:17). But they wanted to go straight through his country so they could follow closer to the eastern shore of the Dead Sea as they went north.

The king of Edom refused, so the Israelites had to circle even farther east than planned. Numbers 20:22 says this made Israel journey "from Kadesh ... unto mount Hor." This mount is also "by the border of the land of Edom" (verse 23).

From Mount Hor, Numbers 21:4 says they had to go back in the direction of the Red Sea (toward that port area of Ezion-geber being implied) "to compass the land of Edom"—such that the re-routing itself caused the Israelites to be "impatient." This explains why some of the earlier areas traversed in Numbers 33:32-35 were retraced later after Aaron's death, as noted in Deuteronomy 10:6-7.

The national allotment foretold in Numbers 34:7-8 says the "Great Sea" to Mount Hor up to Hamath provided a clear west-to-east-to-north overview of the Promised Land's edges. In a later, related comparison, Joshua 10:41 says: "Joshua smote them from Kadesh-barnea even unto Gaza"—presenting an east-to-west sweep of Israel's southern exploits.

The book of Numbers provides a decent sense of the timing here. Aaron died in Mount Hor just four months after his sister (Numbers 33:38), and Israel stayed there for a month to mourn him (Numbers 20:29).

Israel's trajectory after leaving Mount Hor goes through cities that are clearly working east and north around Edom and Moab until reaching "the plains of Moab by the Jordan at Jericho" (Numbers 33:41-48). Three hundred years later, Jephthah tells us of this, including mentioning the Kadesh encampment (Judges 11:17-18).

This took five months but involved two major military campaigns against the Amorite kings Sihon and

explicitly calls it "Meriboth-kadesh" or "Meribath-kadesh" (Ezekiel 47:19; 48:28).

The moniker "Kadesh-barnea" appears to have come later in Moses's writings. Numbers 32:8 is the first place it is named that. The suffix *-nea,* or *nua,* can mean to shake, wander or stagger. Since *bar* can be related to the word for field, *barnea* could literally mean "plain of shaking/wandering." *Nua* is actually used a few verses later to describe how the Israelites would "wander to and fro in the wilderness" (verse 13). From this point forward in the biblical record, Moses and Joshua favor "Kadesh-barnea" as the term for this historic location.■

Og—whose domains include very firm geographic markers, such as well-known tributaries east of the Jordan.

The Water Situation

To further confirm that Israel did not spend the entirety of these 38 years IN Kadesh, here is what the biblical record says.

In his final weeks, Moses said: "So ye abode in Kadesh many days, according unto the days that ye abode there" (Deuteronomy 1:46). This would include the days they abode there the first time, during the expedition of the spies. They obviously moved on, as the next verse Deuteronomy 2:1 tells us. They then "compassed mount Seir many days."

This is also confirmed in the overview account of Numbers 33. Verses 32-36 list four distinct encampments after they left "Bene-jaakan" (synonymous with the first Kadesh visit) before mentioning Kadesh and Mount Hor at the end of the 40 years.

Still, the notion that the Israelites needed some sort of desert oasis to sustain them for an extended period of time isn't irrational. They DID stay at Kadesh for a considerable time when the 12 spies explored the Promised Land in the early autumn of their second year after leaving Egypt. And they stayed there a considerable time at the end of their wanderings.

It wasn't long enough to sustain a huge archaeological footprint, but it was long enough to reasonably wonder if Israel stayed near an oasis of sorts. That's exactly what theologians, explorers and archaeologists have been looking for.

In Genesis 14:7, the author tells us what was known to him as Kadesh was in the time of Abraham named "En-mishpat"—literally, *spring* of judgment. The Deuteronomy 10 mention of Bene-jaakan also includes *Beeroth,* or WELLS.

What of the complaints in Number 20:2 that "there was no water for the congregation"? Verse 1 tells us that this was the "*first* month."

During their stay in Kadesh while the spies roamed, there were no such complaints for lack of water. Their complaint was rather that they would die at the hand of Canaan's inhabitants (Numbers 14:3). And by this point, Israelites weren't bashful about complaining about the lack of water or its drinkability (Exodus 15:22-24; 17:1-7).

So 38 years later, when Numbers 20 tells us they were in the SAME PLACE, the complaints read more like an *upset of expectations.* That "there was no water" implies they EXPECTED water.

What happened? Water in these kinds of oases are typically supplied by precipitation throughout the winter months. This would especially be the case in the Petra region, sitting at a higher elevation than Ain Qedeis. Occasionally, however, an arid winter would cause significant drought for the following year.

To be fair, this type of dry winter and its tragic effects on water for the coming year are a reality in BOTH Kadesh candidates. Proof that it was a consideration in Petra was the infrastructure later created by the Nabataeans—engineered to ensure water even in the face of failed winter rains.

Here again is the intriguing previously mentioned linguistic choice in the biblical text. In Numbers 20, Moses is told to speak to the rock. Nearly 40 years earlier, near Horeb, God told Moses that He would stand on a rock and Moses was to smite it (Exodus 17:6). The word for *rock* is the more common *tzur.* But when in Kadesh (Numbers 20), the word for "rock" is ALWAYS *sela*—the Hebrew name for Petra.

Another incredibly interesting wording: The rock was to "give forth ITS water" (verse 8). The sandstone of Petra's cliffs allow water to be stored in it—more like a sponge than other types of desert rock (say the dense limestone of Ain Qedeis), even after a dry winter. (The biblical record tells us God intended to perform a miracle through Moses just speaking to the *sela.* He chose rather to smite it twice in anger, and out came the water anyway.)

One more fascinating reference to consider. Later in the journey, Moses writes in his final song: "He made him to suck honey out of the CRAG [*sela*] ..." (Deuteronomy 32:13). Perhaps more than just beautiful poetic parallelism, this statement might make us consider the honeycomb-like *tafoni* formations in some of Petra's cliff faces, and even bees' proclivity to make use of moist, porous sandstone as a haven in which to nest.

None of these linguistic choices are conclusive, of course. And *Ain Qedeis* is indeed similar in name to the Hebrew *Kadesh.* But that of itself wouldn't lock Ain Qedeis as the only option—and a number of clearly unrelated places bear the name "Kadesh" (case in point Kadesh, Syria—the location of the famous 13th-century B.C.E. Battle of Kadesh). As Schmidt himself stated, "There are numerous instances of old names migrating to new settlements." I would suggest that a place with a more GENERIC Hebrew term (like *Kadesh,* which can mean "holy" or "sacred") would be a less likely candidate given that there is another site that actually bears the names of prominent figures like Moses and Aaron—the latter, according to tradition, having even been buried in this particular area.

Despite the last century or more of scholarship, Kadesh was believed to be just outside and southeast of Israel's Promised Land allotments in the periphery of Edom. This is what the biblical record confirms—even if archaeology hasn't yet provided solid evidence from this archaic and nomadic time period. ■



An Area D bucket chain underway



Tara holds the metal detector for Uzi as he reveals a coin discovered in Area D.



Area D supervisor Amir chats with his assistants, Shoham and Aviv.



Deepika holds a bone distaff.



Laurie dry sifts.

MEANING FROM PAGE 3

I also want to thank our wonderful staff, whose professionalism, dedication and good humor made this season possible. Area supervisors: Amir, Chris and Akiva; assistant area supervisors: Shoham, Gal, Aviv and Shlomo; Aubrey, our photographer; Nadav, our registrar; Elchai, the administrator; and Marcos, our surveyor—all of whom kept this excavation moving from one day to the next. Much of what you do is invisible to visitors, but it is never invisible to those of us who depend on it every single day.

Amir and Chris, time and again, when Orit and I hesitated or wondered whether a particular area was worth pursuing, you encouraged us to keep going. More than once, your professional judgment, persistence and gentle, or not-that-gentle, insistence led directly to some of the most important discoveries of this season. Thank you for pushing us forward and for reminding us that good archaeology often rewards those who are willing to dig just a little bit further.

This season has reminded me that professionalism is essential, but it is not enough. What makes a truly exceptional excavation is the spirit in which the work is done, good humor, generosity, patience, a willingness to help without being asked. The ability to stay focused when the days are long and the heat is unforgiving. Those qualities cannot be measured on a locus sheet, but they shape every successful excavation. Thank you all for bringing those qualities with you every morning.

And finally, I want to thank Orit. Thank you for sharing not only the excitement of discovery but also the responsibility: the planning, the decisions, the endless logistics and the long months of post-excavation work that still lie ahead. I am deeply grateful to have a partner with whom I can share both the burdens and the joys of leading this excavation.

As I look around this gathering tonight, I am reminded of one of archaeology's greatest rewards. We spend a few short weeks uncovering traces of people who lived thousands of years before us. But in the process, we leave traces of our own—not in the ground but in the friendships we build, the knowledge we create, and the community we become.

There is a beautiful verse in the book of Psalms:

ירושלם הבנויה כעיר שחברה לה יחדו

"Jerusalem is built as a city that is united together."

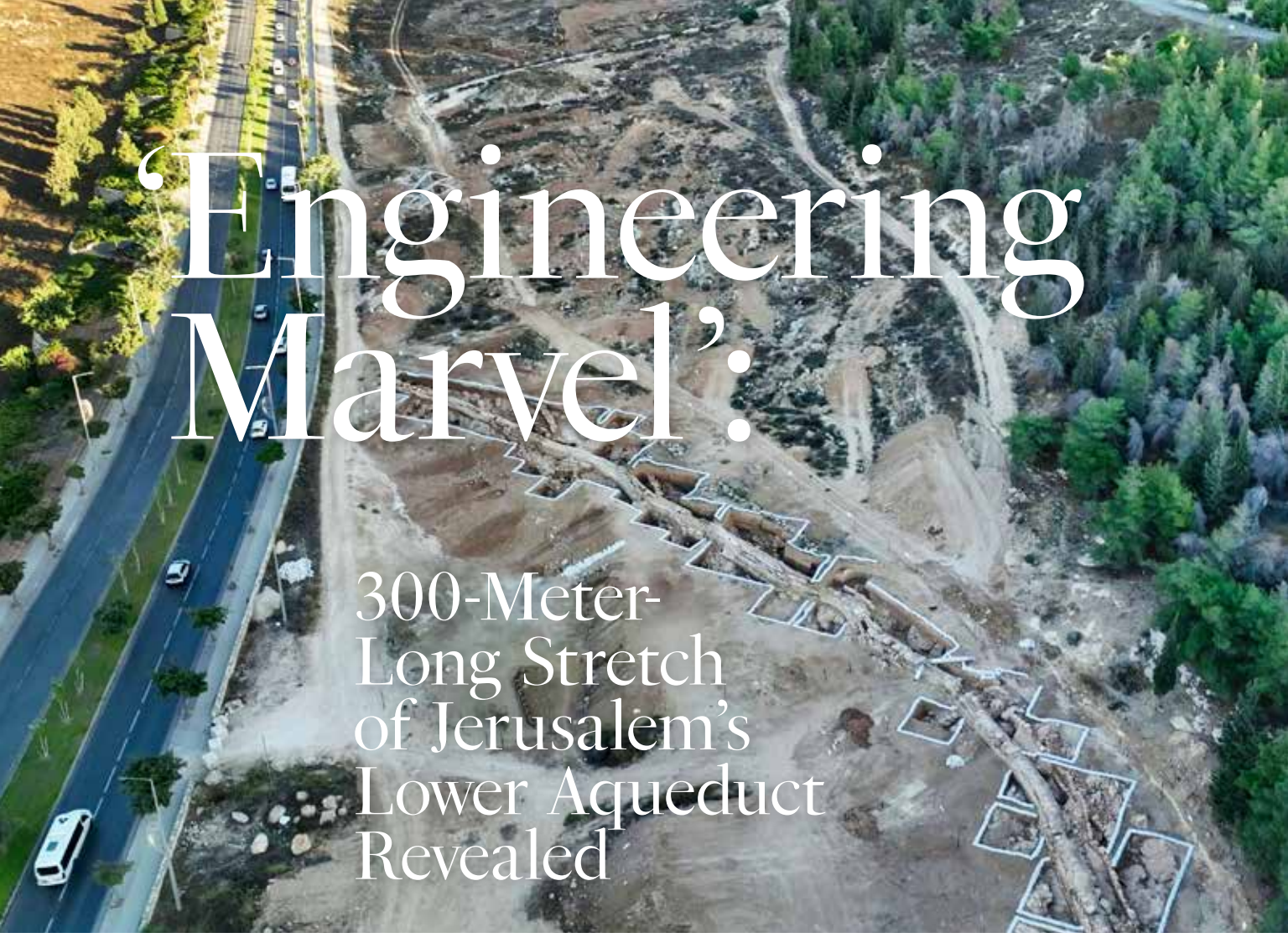
Rabbinic tradition interpreted שחברה לה יחדו not as referring to the city's architecture but to Jerusalem itself being a place that joins people together.

Looking around here tonight, I think that is one of the most beautiful things archaeology has done: It has brought together people from different countries, different backgrounds and different experiences, united by curiosity, hard work and friendship.

Thank you all—for your hard work, your curiosity, your patience, your determination and your friendship. Together, we have shown once again that the greatest discoveries are rarely made in a single dramatic moment, but are built one bucket, one stone and one day at a time.

For 3,000 years, people have come to Jerusalem for many different reasons—to worship, to rule, to study, to fight, to dream. We came here for a different purpose: to learn. And in doing so, we have become one small chapter in the long history of this remarkable city. ■

AUBREY MERBAUD/ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY (6)



‘Engineering Marvel’: 300-Meter-Long Stretch of Jerusalem’s Lower Aqueduct Revealed

More of ancient Jerusalem’s Lower Aqueduct is unearthed.

BY GEORGE HADDAD

In preparation for the construction of a Jerusalem neighborhood near Ramat Rahel, 300 meters (10,000 feet) worth of an ancient and sophisticated water system was unearthed—part of a more than 2,000-year-old water system known as the Lower Aqueduct, designed to bring water into Jerusalem. While portions of this aqueduct have been revealed in the past, ongoing excavations conducted by the Israel Antiquities Authority (IAA) are continuing to reveal how this aqueduct, apparently originating in the Hasmonean Period, carried spring water from the Gush Etzion area via Solomon’s Pools to central Jerusalem (see map, page 12).

According to excavation directors Dr. Benyamin Storchan and Gil Freid, the Lower Aqueduct was an “impressive engineering project, probably built in the time of the Hasmonean kings to supply water to Jerusalem. The system was so well planned that it remained in intermittent use until about 100 years ago. The aqueduct runs about 21 kilometers from Solomon’s Pools, south of Bethlehem, to Jerusalem. Along most of the route, the water flowed along a very gentle gradient, dropping just 1 meter in elevation per kilometer.”

Water needed to travel vast distances by gravity alone—without mechanical help—so the ancient city planners had to maintain precise gradients that spanned over kilometers, adapting and working with the natural slopes and bedrock. Clean-out points were also built along the route to allow clearance of blockages and debris.

Because the aqueduct remained in continued use for centuries, it provides a unique snapshot of development over time. Originally,

EMIL ALADJEM, ISRAEL ANTIQUITIES AUTHORITY (3)



Aerial view of the Jerusalem Lower Aqueduct uncovered near Ramat Rahel.



Dr. Benyamin Storchan, excavation director on behalf of the Israel Antiquities Authority



During the Ottoman period, stones were embedded in the wet plaster that covered the side of the aqueduct.

water flowed through a plastered channel; later ceramic pipes were installed during the Ottoman Period. The evidence of continued repairs and upkeep shows its importance and the immense effort to maintain Jerusalem's water supply.

The aqueduct was originally constructed to service Jerusalem's growing needs during the later Second Temple Period, with the city's burgeoning population and temple-related water requirements—especially during the pilgrimage periods throughout the year. In September, the discovery of a monumental mikveh complex from our own excavations on Jerusalem's Ophel was announced (page 8)—a facility that likely would have been fed by such aqueduct-carried water.

According to Dr. Amit Re'em, Jerusalem district archaeologist of the IAA, the Lower Aqueduct is an "engineering marvel."

"Even today, with all our modern technology, building such a system would require extensive planning and effort," he stated. "The thought that about 2,000 years ago they managed to bring water to Jerusalem this way is astonishing, and we want the public to be able to appreciate this achievement up close."

The aqueduct will be preserved and the IAA and Israel Land Authority (ILA) plan to incorporate it into the entrance of the new neighborhood. Yehuda Eliyahu, acting director of the ILA, said in a statement: "The spectacular discovery of the ancient aqueduct in the heart of the area planned for the new neighborhood in Jerusalem reminds us that we are continuing a glorious chain of generations of building and development." ■



Study Reveals Jewish Name Continuity From IRON AGE JUDAH to PERSIAN PERIOD YEHUD

Analysis of nearly 500 names from Late Iron Age Judah through Persian Period Yehud reveals some change—but mostly striking continuity. BY BEATRICE IGLESIAS AND CHRISTOPHER EAMES

A study published in the 2026 volume of Hebrew University's *Jerusalem Journal of Archaeology* demonstrates a striking continuity of Jewish naming practices in the land of Judah from the late Iron Age II (seventh to early sixth centuries B.C.E.) and throughout the Persian Period (circa 539–332 B.C.E.), during which time the territory became known as Yehud. The study, conducted by Dr. Mitka Golub of Hebrew University, was based on comparative analysis of nearly 500 names found on ancient inscriptions.

The goal of the onomastic study (the study of proper names) was to determine whether name-giving practices continued or changed over time under different governing jurisdictions, especially in light of the interim period of upheaval between the Iron Age and Persian Period. The early sixth-century B.C.E. Babylonian invasions and deportations "led to a dramatic decline in Jerusalem's population and size, estimated at approximately 80-90 percent of its late Iron Age peak," with a "population of Yehud in the mid-fifth century B.C.E. [of] no more than 20,000 or 30,000," wrote Golub. In spite of this, her study reflected a surprising degree of continuity in naming practices found among the Persian Period population of Yehud right up to the end of this period (late fourth century B.C.E.).

Dr. Golub's study analyzed the 489 known personal names from various artifacts that have come to light from this region, dating to these respective periods. Fifty of these were from artifacts belonging to Persian Period Yehud, most of which were concentrated around the Jerusalem region and dated toward the latter part of the Persian Period. The remaining 439 names were from late Iron Age II Judahite sites. At face value, the smaller number from Persian Period Yehud "reflects Yehud's limited demographic and territorial scale in comparison with late Iron Age II Judah," thus "reflecting gradual demographic recovery," Golub explained. In spite of this smaller corpus of Persian Period names, a full "one third of the Yehud names also occur in the Judahite onomasticon."

JULIA HENDERSON/ARMSTRONG INSTITUTE OF BIBLICAL ARCHAEOLOGY

"Thus, notwithstanding the chronological gap and the likelihood that some returnees had adopted non-Judahite names in the Babylonian diaspora, the similarities between the two onomastica suggest a significant degree of cultural and religious continuity. … This proportion is particularly noteworthy given the significant chronological gap between the two onomastica: The vast majority of individuals (78 percent) in the Yehud onomasticon date to the late Persian Period (circa 450–332 B.C.E.)," Golub wrote.

For her study, Dr. Golub organized names according to *name type, theophoric element* and *root.* She further divided name types according to *theophoric names* (names bearing a divine element, such as derivatives of the names El and YHWH—*El*isha and Dani*el, Jeho*ash and Jerem*iah*); *hypocoristic theophoric names* (shortened names without their oft-associated divine element—Hanan vs. Hananiah, or perhaps for an English equivalent, Fred vs. Godfred); and *other names* (names entirely secular in nature, without any connection to theophoric names).

Additionally, Dr. Golub assessed the types of artifacts on which these names were found to compare the social profiles. Jars, seals, bullae and coins were classified as a marker of high-ranking individuals; ostraca and papyri provided names of individuals in a social level. The results showed that names from the late Iron Age had a comparatively similar social profile with those from the Persian Period, allowing for a fair onomastic comparison.

Considering the relatively small Yehud sample size, the comparison of Late Iron Age and Persian Period naming conventions was striking in the similarities it revealed. "The results indicate notable continuity," wrote Golub. "The distributions of the main name types and theophoric elements follow similar patterns. Yahwistic names are dominant in both corpora and occur in similar proportions, underscoring YHWH's central role in both. The root שלם, a strong Judahite marker, is the most frequent in Judah and the second-most frequent in Yehud, while חנן and עזר are common in both. Approximately one third of the Yehud names also occur in Judah."

Dr. Golub continued: "[N]ames with YHWH are by far the most common (95 percent of the total in Yehud and 80 percent in Judah), names with divine appellatives are a small fraction (5 percent in Yehud and 6 percent in Judah), and names including other divine names are absent from Yehud and nearly absent from Judah."

Two main changes were observed when comparing these names: The infrequent use of El-names in Judah disappeared entirely among names in Yehud, and the form of the Yahwistic suffixes shifted from יהו- (*-yahu*) to יה- (*-yah/-iah*). "The shift from יהו to יה is also reflected in the internal development of biblical Hebrew, where יה gradually displaces יהו in late biblical Hebrew texts. Interestingly, the form יו was the dominant Yahwistic element among Israelite names, where it mainly occurred as a suffix. Conversely, among Judahite names, it was rare and occurred only as a prefix."

Golub further highlighted another notable difference between Judahite/Yehudite names vs. Israelite ones: Her comparison "shows that שלם was the most frequent root in Judah and the second-most frequent in Yehud. This root serves as a strong marker of Judahite identity: *It is absent from Israel but is the most dominant in Judah,* among the Judahite exiles in Āl-Yāhūdu in Babylonia and among the donors to YHWH from Elephantine," a Jewish military outpost located in the Nile River (emphasis added). This, along with other noted cultural differences also reflected in the corpus, reinforces the situation described in the biblical account of returnees from the Babylonian exile comprising representatives of the southern kingdom of Judah—*not* the northern kingdom of Israel, exiled long prior (as described in our July-August 2026 article "Jews vs. Israelites? An Introduction to the Lost Tribes of Israel"—*ArmstrongInstitute.org/1512*).

The proportions of theophoric elements are "similar in both corpora: YHWH predominates in both, divine appellatives are few, and other divine names are absent or nearly so. … Yahwistic names in Yehud are dominant across social levels, indicating that Yahwism was deeply rooted throughout society"—a reality, of course, described throughout the biblical account of this period, such as in the books of Ezra and Nehemiah.

Nehemiah 9:5 states: "Then the Levites, *Je*shua, and Kadmiel, Bani, Hashabn*iah,* Sherebi*ah,* Hodi*jah,* Shebani*ah,* and Pethahi*ah,* said, Stand up and bless the Lord [YHWH] your God for ever and ever …" (King James Version). ■

CORRECTION:
In the July-August 2026 issue, within a sidebar on page 36, subtitle "3 Maccabees," the book was stated as dating from the "third century B.C.E.–first century C.E." This, of course, should have read "first century B.C.E. …." This sidebar was a later inclusion and the error was caught by the author soon after the magazine went to print—"probably the result of having *third* Maccabees on the brain." A correction has been made in the online article and PDF. We apologize for any confusion.

Bringing Irish Dance to the Cities of Israel!

BY BRAD MACDONALD



I'm thrilled to share some exciting news: America's greatest Irish dance show, *Celtic Throne: Mystery of Ireland,* is returning to Israel! The four-city, seven-show tour runs November 4-19 and includes a performance in Jerusalem.

Now, I know what you're thinking: Why is an archaeology institute telling me about an Irish dance show?

Fair question. Here's the answer: *Celtic Throne* is produced by Herbert W. Armstrong College, the same college that supports the Armstrong Institute of Biblical Archaeology (AIBA) and our excavations on the Ophel. Yes, it's an unlikely pairing! But what can we say? We love Irish dance and biblical archaeology! In fact, many *Celtic Throne* dancers are also diggers and have excavated in Jerusalem! The *Celtic Throne* family has been intimately involved in uncovering the heritage of the Jewish people and supporting the work of AIBA.

In summer 2025, *Celtic Throne* became the first major international show to tour Israel since Oct. 7, 2023. The troupe, which includes children and teenagers, didn't come despite the war in Gaza. It came because of it. At a time when much of the world was turning its back on Israel, *Celtic Throne* turned up.

Then came the plot twist. Just hours after their performance in Haifa, the Twelve-Day War began and Iran launched waves of ballistic missiles at Israel. The cast and crew went to bed after a triumphant show and woke up in a war zone! The remaining shows were canceled, and with Israeli airspace closed, the whole company made a hasty exodus overland to Egypt and finally flew home from Sharm el-Sheikh. It wasn't exactly the tour finale we planned!

But the story doesn't end there. *Celtic Throne: Mystery of Ireland* is returning to Israel to finish what it started! Why? Because we love Israel and the people of Israel. That is why for over 60 years we have been working within Israel on various cultural projects. You're well aware, I'm sure, of the "iron bridge" partnership we have with Hebrew University in our archaeological excavations.

There was more to that iron bridge partnership than just archaeology, however. In addition to supporting archaeology, this partnership, established by our namesake Herbert W. Armstrong, had a second goal. That goal was to bring the children of Jerusalem—Jew, Muslim and others—together to learn the way of peace. To further that goal, Mr. Armstrong's Ambassador International Cultural Foundation supported Jerusalem's International Cultural Center for Youth (ICCY).

The ICCY was founded by Israeli Tourism Minister Moshe Kol in 1960. Mr. Armstrong began supporting the ICCY in 1968. He saw great value in Mr. Kol's dream of seeing children of all nations and ethnicities living








and playing and growing together in the way of peace. And Mr. Kol, for his part, saw the connection between Mr. Armstrong's life's work and the youth center.

Much like *Celtic Throne,* a key part of the ICCY revolved around dancing and music. In 1984, Moshe Kol wrote: "In addition to the after-school activity programs in the main Jerusalem center, folk dancing and folklore programs keep the building open until close to midnight. Each year thousands of local and foreign visitors attend the entertaining and cultural programs featuring Yemenite ethnic dances, Arab drumming, Israeli folk dances and community singing."

We have a legacy of supporting, not just archaeology, but also music, dancing and peace within Israel.

Mr. Armstrong's contributions did not go unnoticed by those who sat in the gates of Jerusalem. In fact, following his first meeting in the Knesset in 1968, Mr. Armstrong was welcomed by every prime minister and president of Israel for the rest of his life. These meetings and relationships went deeper than a simple handshake and photo opportunity. Israeli leaders valued the work, the counsel and the friendship of Herbert Armstrong.

And so too today, the families of *Celtic Throne* value the relationships and legacy we have established within Israel. After many years of this "iron bridge" partnership, we are excited to share this show with the people and cities of Israel. ■

MAGAZINE FEEDBACK

Thank you so very much for making your remarkable archaeology magazine available to the public! It is informative, inspiring, and glorifies our God. May He bless you for your work and efforts, and may your message reach all who follow God and especially all who are searching for truth.

WISCONSIN, UNITED STATES

My appreciation for this invaluable contribution to biblical archaeology. It has allowed us to understand the relevance of the historical context of the Scriptures.

CHILE

Let the Stones Speak is a wonderful reading series. There's so much to learn. Thank you for the stellar history and information.

ILLINOIS, UNITED STATES

We were blessed to watch the YouTube video on the archaeological project on the Ophel, and we are very interested in receiving a free issue of your magazine, *Let the Stones Speak.*

CANADA

This magazine is not only interesting reading but also helpful for Bible studies as you get the historic background necessary for a proper understanding of many parts of Scripture.

GERMANY

I have just read the latest magazine (July-August 2026) with keen interest, and especially the comprehensive 5-page article on Hezekiah by Micah van Halteren, which I found thoroughly informative!

ENGLAND

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WEBSITE ArmstrongInstitute.org

E-MAIL
letters@ArmstrongInstitute.org;
subscription or literature requests:
request@ArmstrongInstitute.org

PHONE Israel: +972-(0)2-372-3591

WE'RE MOVING

STAY TUNED

Some of our followers may have heard the news: The building on David Marcus 1, which our institute has rented for just over four years, was recently sold by the owner to an undisclosed buyer for $14.7 million. As such, we'll be moving to another building in Jerusalem. We'll keep you posted on the move—so stay tuned!

In the meantime, we can be reached with physical mail to our new address:

P.O. BOX 31210
JERUSALEM, 9131101
ISRAEL

Updates to follow!

ARMSTRONG
INSTITUTE OF BIBLICAL ARCHAEOLOGY

ONLINE ArmstrongInstitute.org
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