

Dead Sea

*New Discoveries in
the Cave of Letters*

EDITED BY **CARL E. SAVAGE,
PHILIP REEDER,
RICHARD A. FREUND,
AND HARRY M. JOL**

Crosscurrents

NEW STUDIES ON THE MIDDLE EAST

Dead Sea: New Discoveries in the Cave of Letters is a multidisciplinary study of the Cave of Letters in the Nahal Hever of the Judean desert, a site reputed for having contained the most important finds evidencing the Bar Kokhba revolt, including the cache of bronzes found buried there and the papers of Babatha, one of the few direct accounts of the context of the Bar Kokhba revolt in the second century C.E. Chapters by diverse scholars report on and discuss the ramifications of the 1999–2001 expedition to the site, the first organized archaeological activity there since the expeditions at Nahal Hever by Yigal Yadin in 1960–1961. Using advanced technological methodologies alongside more “traditional” archaeological techniques, the team explored several research hypotheses. The expedition sought to determine whether the material collected in the cave could substantiate the hypothesis that the cave was a place of refuge during both the Bar Kokhba revolt and the earlier Great Revolt against the Roman Empire. The expedition also researched the viability of a relatively long-term occupation of the cave while under siege by Roman forces, questioning whether occupants would have been able to cook, sleep, etc., without severely degrading the cave environment as a viable place for human habitation. The individual chapters represent the result of analysis by scholars and scientists on different aspects of the material culture that the expedition uncovered.

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NEW STUDIES ON THE MIDDLE EAST

R. Kevin Lacey and Sari Nusseibeh
General Editors

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Abbreviations

1D	One-Dimensional
2D	Two-Dimensional
3D	Three-Dimensional
AGC	Automatic Gain Control
AMS	Accelerator Mass Spectrometry
Ar/Ar	Argon/Argon Dating
BCE	Before Common Era
BP	Before Present
C-14	Carbon 14
CE	Common Era
CM (cm)	Centimeters
CMP	Common Mid-Point
COL	Cave of Letters
DC	Direct Current
EM	Electromagnetic
ERT	Electrical Resistivity Tomography
GPR	Ground Penetrating Radar
HZ	Hertz
ICP	Inductively Coupled Plasma
INAA	Instrumental Neutron Activation Analysis
K/Ar	Potassium/Argon Dating
KG (kg)	Kilograms

KM (km)	Kilometers
KM ²	Square Kilometers
LSC	Liquid Scintillation Counter
M (m)	Meters
Ma	Million Years Ago
MBGS	Millimeters Below Ground Surface
MHz	Megahertz
MM (mm)	Millimeters
MPa	Megapascal—a unit for measuring pressure
MSL	Mean Sea Level
Na/Ca	Sodium to Calcium Ratio
NS (ns)	Nanosecond
OHM-M	Ohm-Meters
PS (ps)	Per second
PSI	Pounds per Square Inch
RPM	Revolutions per Minute
Sr/Ca	Strontium-to-Calcium Ratio
TM	Trademark
USA	United States of America
U-Th	Uranium Thorium Dating
UXO	Unexploded Ordinance
V	Volts
vPDB	Vienna Pee Dee Belemnite Standard for Marine Carbonate Sediments
XRD	X-Ray Diffraction



Acknowledgements

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Philip Reeder, Richard A. Freund, Harry M. Jol and Carl E. Savage

Foreword

BARUCH A. LEVINE

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In 1963 Yigael Yadin simultaneously published English and Hebrew versions of a volume entitled *The Finds from the Bar-Kokhba Period in the Cave of Letters*. (Jerusalem: Israel Exploration Society). It presented a detailed review of the expeditions at Nahal Hever, the site of the Cave of Letters (as Yadin named it), conducted in 1960–61, including a mapping of the interior of the Cave, with its burials, as then known, and of the nearby Roman camp. Yadin and his staff registered all of the material finds, including objects made of metal, glass, ceramics, stone and leather; also jewelry, firewood and objects of wood, and leather. No organized archeological activity occurred at the Cave of Letters between 1963–1999, except for occasional testing and surveying. Presenting a collection of diverse studies, the present volume reports on, and discusses the ramifications of the recent expeditions at this site in 1999–2001, conducted by the four editors, Philip Reeder, Richard Freund, Harry Jol and Carl E. Savage, and their staff of experts, who applied the most advanced technologies in the process.

“BOTH SIDES OF THE AISLE”

I was pleased by the invitation to write the Foreword to the present volume, particularly because I come from across the aisle! Ada Yardeni and I collaborated in editing the Semitic papyri found in the Cave of Letters for *The Documents from the Bar Kokhba Period in the Cave of Letters: Hebrew, Aramaic, and Nabataean Aramaic Papyri* (Judean Desert Studies III, 2002). Jonas C. Greenfield, collaborated with

Ada Yardeni on the Naḥal Ḥever papyri before his untimely death in 1995, which yielded editions of two major papyri, and he wrote numerous studies relating to the Naḥal Ḥever papyri. That volume included the Bar Kokhba letters, with new editions of two Greek letters by Hannah Cotton. Over the decades, and spanning regrettable delays, many scholars have investigated the rich textual evidence, including numerous Greek papyri, from the Cave of Letters and from other sites in the Judean Desert, which produced hordes of quotidian, mostly legal documents. In 1989 Naphtali Lewis edited the Greek papyri from Naḥal Ḥever, in a volume entitled *The Documents from the Bar Kokhba Period in the Cave of Letters: Greek Papyri* (Judean Desert Studies II; Jerusalem: Israel Exploration Society). In 2000, Ada Yardeni published a two-volume *Textbook of Aramaic, Hebrew, and Nabataean Texts from the Judean Desert*, in Hebrew, with English summaries and translations of texts (Jerusalem: The Hebrew University). In that publication, she lists the volume of Naḥal Ḥever papyri, then forthcoming, as editio princeps. In *Aramaic, Hebrew and Greek Documentary Texts from Naḥal Ḥever and Other Sites* (Discoveries in the Judean Desert XXVII; Oxford, 1997), Hannah Cotton edited (in many cases re-edited), numerous Greek Papyri from Naḥal Ḥever, and in the same volume, Ada Yardeni edited Semitic papyri from the Seiyal Collection, also originally from Naḥal Ḥever, which she had previously edited in a Hebrew volume. All of these publications provide extensive bibliographies.

The first, full volume devoted to Judean Desert papyri and other textual finds appeared in 1961 under the title *Les Grottes de Murabba'at* (Discoveries in the Judean Desert II; Oxford). It included an archeological introduction by Roland de Vaux, with the textual finds edited by J.T. Milik and P. Benoit. From that point on, archeology and exegesis have pretty well parted company. It was certainly an achievement on Yadin's part to produce the 1963 report in such short order, but the fact that his volume lacked critical editions of the papyri may have initiated a policy of separate publication that endures to this day. Now that the texts have been edited, and renewed archeological exploration has been accomplished and reported, it may be possible to chart a new course for Dead Sea studies, generally, and specifically for assessing the significance of Naḥal Ḥever. The objective would be to arrive at a synthesis of text and artifact, of physical environment and human history. A sizable historical literature on the Bar Kokhba revolt and the Dead Sea region has arisen over the years, which needs to be pursued further, and integrated with the textual and archeological evidence.

In the past half century, specialization has been the dominant trend in almost every branch of research, in response to greatly expanded discovery. The problem posed by specialization is that it inevitably narrows the line of vision while at the same time deepening it, and consequently has the effect of reducing scholarly capabilities in related fields. One wonders whether the multi-tasking scholars of yesteryear, the likes of W.F. Albright, Benjamin Mazar, Roland de Vaux, and Yigael

Yadin, himself, could now master, or even control all of the requisite disciplines. The only way to stay afloat is through team effort, which is highly developed in archeological circles, as the present publication demonstrates, but is still lagging in the fields of textual and historical research.

The Cave

It is reassuring that many of the archeologists who contributed to the present volume have expressed serious interest in historical questions, even though they were reporting primarily on advanced geophysical technologies. As explained by Richard Freund, and several other contributors, the recent excavations bore an internal agenda. Among other things, they were intended to probe Freund's theory that there was 1st century C.E. habitation of the Cave. Freund concluded that Jews hid inside the Cave from the Romans at the time of the First Revolt, when the Jerusalem Temple was destroyed (66–70 C.E.), and during the period between these events and the Second Revolt (132–135 C.E.).

Two overviews of the recent excavations set the stage for the volume as a whole, one by Richard Freund and the other by John F. Shroder. Both summarize the wide variety of finds in the Cave, as well as the exploration of the cave complex as a whole, and address the overall significance of the expeditions of 1999–2001. Freund ("Acknowledgements and Summaries, 1999–2001") approaches the material from the perspective of his finding that there were four habitation levels, not two, and argumentation to that effect accordingly informs his comprehensive survey. Shroder ("Overview of New Geoarchaeological Discoveries in the Cave of Letters, Israel") is more detached, allowing for the possibility that there was a 1st century B.C.E. habitation level, but treating the evidence more independently of that question.

In effect, the debate over this historical issue threads through many of the studies. Thus, Carl E. Savage ("A First Century Occupation in the Cave of Letters? Results from the B/C Passage") contributes a careful assessment of habitation layers, with reference to coins and ceramics, and takes into account the fact that stratification within a cave complex poses different problems from those encountered in excavating a tell. Most interesting is Savage's comment in this regard: "If the coins and pottery had been found together outside of the Cave of Letters context, one might be able to speculate that a late first century date for the collection of finds would be plausible given the individual temporal markers for most of the pottery finds."

Making no claim to archeological competence, it is my sense that Freund's periodization makes sense in historical and sociological terms. I hasten to emphasize that Freund's position is proactive, and serves to deepen the discussion in significant ways. What we require now is a detailed history of Jewish habitation in the general area of Naḥal Hever and the Dead Sea, going back to the Maccabean period, and further. The likelihood that Jews took advantage of this cave complex for refuge at

the time of the First Revolt depends to a considerable degree on patterns of area settlement at various periods, not only on evidence provided by the Cave, itself. It is logical to propose that, under similar stress, earlier Jews would have availed themselves of such an extensive cave complex as refuge just as the Jews of the Bar Kokhba period had done. Thus, Harry Jol, in his methodic, and clearly formulated study “Ground Penetrating Radar Subsurface Imaging within the Cave of Letters” states the following:

Although GPR (= Ground Penetrating Radar) could locate the Bar Kokhba floor, the question remained whether the cave’s lower stratigraphy might indicate other habitation levels beneath this layer. Since other caves in the area have had artifacts associated with the Jewish Revolt of the first century CE to as far back as the Chalcolithic period, the ability to identify these different archaeological levels (horizons) is an important consideration for archaeologists and historians.

In my view, this is the most succinct formulation of the challenge posed by Freund’s hypothesis. Similar, technologically speaking, is Paul Bauman’s contribution “Electrical Imaging and Metal Detection in the Cave of Letters.” This project utilized a technique known as ERT (= Electrical Resistivity Tomography), which affords an additional method of control alongside GPR, in Harry Jol’s report. Once again, the objective was to identify occupation levels and to distinguish them from rubble that fell from roof collapses. This can be accomplished, as Bauman explains, by geophysical techniques, but these same techniques cannot assign dates to such features. Nonetheless, Bauman fully accepts the conclusion that the so-called “Bar Kokhba floor” was populated when the documents found in the Cave tell us it was.

Generally speaking, all of the contributors seemed to recognize that as exacting as technological instruments and mechanisms may be, interpretation of the data they provide must be analyzed with the application of discrete judgment. I call attention to several cases in point. Amos Frumkin contributes a chapter on the geology and formation of the cave 10–7 million years ago. His report is highly technical, and deals with environmental processes utterly remote from literate culture. And yet, in summarizing the importance of the cave, he calls attention to the fact that “it contained the most important finds of the Bar Kokhba revolt.” He further notes that hundreds of other caves have been located in the region, some of which yielded documents and artifacts traceable to the Bar Kokhba period. Shachar Argov contributed a chapter entitled: “Rock Breaking at the Cave of Letters” He notes that subsequent to the 2nd century C.E. “earthquakes caused ceiling rock-falls to bury artifacts hidden by the cave’s dwellers.” He proceeds to describe in detail the tools used to split large rocks so that they could be removed without upsetting the interior formation of the cave.

Philip Reeder’s contribution: “Microclimatic Variations and Patterns of Cave Use at Cave of Letters, Israel” testifies to the cultural importance of climate (in-

cluding “micro-climate”) as a factor in the preservation of ancient documents. As Reeder explains, it is the exceptional aridity of the Dead Sea region that accounts for its importance as a new venue of papyrological research outside ancient Egypt. Reeder’s measurements deal primarily with the question of “how human activities affect cave climate,” and he concludes that “the air outside the cave is usually less moist than the air in the cave.” Accordingly, six research questions relevant to air-flow and human presence in the cave were posed, and all of them answered after various projects involving the installation of monitors had been completed. Question number 6 is particularly suggestive: “will airflow patterns in the cave indicate patterns of human utilization/?” This was answered by utilizing smoke tests, especially in the “hearth area,” as we would expect. Issues pertaining to climate hold a particular attraction for me. In 2003, a volume was published by E.J. Brill bearing the title: *Semitic Papyrology in Context: A ‘Climate’ of Creativity*. It brought together papers presented at an in-house conference held at New York University in 2000. The title was purposely allusive, referring to the hordes of ancient papyri recently discovered in the Dead Sea region.

Our discussion of “the Cave” concludes with two studies. The former is Philip Reeder’s other contribution, “Mapping the Cave of Letters.” In a detailed review, Reeder shows how the new mapping of the cave not only enlarged the length of the Cave to 525 meters, 275 meters longer than previously mapped, but also provided new information on passageways and other structural features of the Cave. Digital technology was employed, which allows for feeding-in new data on base maps. Here is how Reeder introduces his overall report:

The COL (=Cave of Letters) is important because it constitutes one of the few other sites concerning the Bar Kokhba revolt. Because so little is known about this war in which both sides are suspected to have lost heavily, archaeology is one of the ways to increase the historical record.

THE ARTIFACTS

Having discussed studies of the Cave, itself, let us move to the artifacts discovered within it. These can be outlined briefly: Richard Freund presents further argumentation for the existence of a 1st century habitation level based on the evidence of an incense shovel, comparable to one unearthed at Bethsaida. His discussion, which is a model of artefactual analysis, proceeding from the specific to the general, makes the case that it would be misguided to rule out an earlier habitation level at Naḥal Hever, although the evidence for it is limited. Freund reviews the inventory of incense shovels previously discovered by Yadin, as well as those found elsewhere, and discusses their afterlife in synagogue iconography. Clearly, this was an important artifact, in terms of both utility and symbolism, and Yadin’s treatment

of the issue of its historical significance had been open to criticism. Jan Gunneweg reviews the application of “Instrumental Neutron Activation Analysis” to selected pottery sherds and other clay products, once again concluding that an earlier level is possible, but that this particular technique could not be expected to confirm it. Here is what he has to say:

We are, therefore, inclined to conclude that more research and analyses have to be performed on local clays from the environment of the cave, itself, as well as of pottery unearthed in Engedi and/or Masada before one can claim with some certainty that the Cave of Letters’ ceramics are from before 70 AD.

Nili Lipshchitz presents her findings from subjecting wood, mostly branches found in the cave to radiocarbon testing. The results indicated that some of the branches were datable to the 1st century C.E., while others were later than the Bar Kokhba revolt. Whereas it can be determined that the wood was brought in from nearby, and that some of it was “old wood”, it remains uncertain as to whether the evidence is sufficient to confirm an earlier habitation level. The contribution by Fred Strickert (“The Meaning of Bar Kokhba Coins and their Distribution”) has direct historical relevance, as we would only expect. Four of the coins date from before the Second Revolt, and of special interest is a small coin dated to the second year of the First Revolt (68), which, as Strickert notes, “may well signal occupation at that period.” A major issue raised by the assemblage of coins is the geographical extent of the Bar Kokhba revolt, including the question of Jerusalem’s status. Strickert takes us through the evidence from sites all over the map as he summarizes the debate over whether or not the Bar Kokhba rebels ever seized Jerusalem or parts of the city. Ultimately, he seems to favor a more limited spread for the revolt than traditionally supposed, and at the very least, calls for revising accepted historical conclusions on that score.

Orit Shamir’s report (“Textiles, Threads, and Cordage from the Cave of Letters”) epitomizes the blessings of aridity! Shamir includes unusual photographs of textile fragments, and concludes that the fabrics used were probably produced at Ein-Gedi, comparing them to other similar finds in the area. Among other things, the textiles give evidence of the traditional Jewish aversion to the inter-weaving of wool and linen prohibited in the Torah (Lev 19: 19, Deut 22: 11), reminding us once again that the communities of Bar Kosiba’s network were observant of Jewish religious practice. Shamir follows accepted models of reporting on textile finds, and does so meticulously, showing that with little exception, the materials were of local origin. Finally Nicolae Roddy (“the Niche of Skulls in the Cave of Letters”) sheds light on burial customs practiced by the inhabitants of the Cave, namely, the secondary burial of skulls and bones, involving the use of baskets and mats. Textiles were often used as wrapping for skeletal remains. As an internal agenda, Roddy enters into a broad discussion of Jewish burial customs and their

theological ramifications during the Roman period, fully utilizing Rabbinic sources in the process. Addressing the question of proper burial under critical conditions, he notes that Rabbinic law showed no objection to burial on the battlefield. The unusual arrangements of burial in the cave may reflect the practice of bone collection as temporary inhumation, although that is questionable.

This leaves two contributions of interest, which differ from the major thrust of the volume. Walter Bouzard (“The Date of the Psalm Scroll from the cave of Letters”) discusses the thorny documentary history of canonical scrolls, particularly the Psalm fragments found by Yadin at Naḥal Ḥever, including the Seiyal collection, which belongs to the same scroll. He proceeds to review the views of eminent scholars on the ductus of the fragments, over which there has been unending debate over the past half-century, or so. As has been observed so many times, the evidence is equivocal. Even if the script points to a 1st century C.E. date, which is far from certain, the possibility remains that later occupants of the Bar Kokhba era brought older texts into the Cave. Finally, we have the charming essay by Alberto Roitman (“Archaeology, Museology, and Identity”), who is Director of the Shrine of the Book, part of the Israel Museum. Roitman focuses on the sociology of display; fascinating fields of study that seeks to interpret attitudes reflected in the manner that antique objects are shown to the public. In the present case, attitudes toward Bar Kokhba and his revolt have shifted, as doubts over his virtue and leadership have intensified in the Israeli ethos.



Preface

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The editors of this book feel, as we are sure many of the other authors do, that the research that resulted in the 14 chapters and three addenda presented in this book was some of the most rewarding and exciting research we have conducted in our careers. While riding across the Judean desert to the cave that first morning in the “desert buggy,” we are sure that more than one person thought “what have I gotten myself into.” Traversing the recesses of the cave by day, fighting the fierce desert winds, and sleeping in the desert by night during the 1999 research, we were by no means comfortable. But we felt lucky to be afforded the privilege to be part of a rare project, where researchers from many disciplines came together for a common cause. That cause was to try to uncover information about the mysterious and mystical figure Shimon Bar Kokhba, and what some of his followers were doing in a cave in the Judean Desert that later became known as the Cave of Letters. From the perilous descent, hundreds vertical meters down the side of the Naḥal Hever, to the horizontal traverse along the narrow ledges, to the ledge below the entrance, danger seemed at just an arm’s length. The anticipation we felt as we climbed the 15-meter long series of aluminum ladders that were set up below entrance #1 for the first time was exhilarating. Would all the planning and logistics mesh? Would the hundreds of kilograms of equipment we brought to the cave from around the world function as intended? Would John and Carol Merrill, who funded a large portion of the project, feel that our findings were worthy of their support? Would we

indeed uncover new information about the mystical figure Shimon Bar Kokhba, and would this information allow us to address some of the nagging questions about Bar Kokhba, his followers, and this period in history? Would the United States Public Broadcasting Systems investment in the production of a documentary based upon this research for its popular Nova series, titled “Ancient Refuge in the Holyland,” filmed during the second expedition to the cave in 2000, be a success? With all of these questions circulating through our conscious and subconscious thoughts, we spent 26 days in the Cave of Letters over a three-year period (1999–2001).

Richard Freund’s book, “Secrets of the Cave of Letters” provides an account of his perspective on what we found in the Cave of Letters and what it means. This volume, *Dead Sea: New Discoveries in the Cave of Letters*, broadens, yet focuses this body of research, by providing detailed accounts of the multi-faceted research design by the researchers most linked to the various segments of the project. In all, 18 different authors have contributed their unique perspectives to this volume.

The Cave of Letters Project actually had its origins in another project. The University of Nebraska at Omaha (UNO) formed the Bethsaida Excavations Project in 1991. Bethsaida is an ancient city located on a hill near the north shore of the Sea of Galilee. Nine of the authors associated with this volume also have ties to Bethsaida. In 1998, Richard A. Freund, then the Chair of the Department of Philosophy and Religion at UNO, began to lay the groundwork for our first expedition to the Cave of Letters in July 1999. This was followed by subsequent expeditions in July 2000 and 2001. These would be the first Israeli government sanctioned research efforts in the cave since those of famed Israeli archaeologist Yigael Yadin in the early 1960’s.

Of the 18 different authors affiliated with *Dead Sea: New Discoveries in the Cave of Letters*, twelve traversed the ledges and ladders to enter the cave and collect their data. Additionally, samples were collected in the cave and then transported to various laboratories for radio carbon, instrumental neutron activation, dendro-chronological and detailed textile analysis by researchers who have also contributed chapters to this volume. Also, part of the research team was students that contributed to both the field and laboratory work associated with this project. The Cave of Letters proved to be an outstanding natural laboratory, wherein students were provided with unparalleled experiential learning opportunities.

Our discussions regarding the creation of this edited volume began in 2004 while at a Biblical Archaeology and Literature conference (the Batchelder Conference) at the University of Nebraska at Omaha. We revisited the topic for two more years at this recurring conference in Omaha, and in 2006 we worked out a framework for what we wanted the volume to include. It was decided that it would be a cross-disciplinary undertaking that would include relevant works by geographers, geologists, archaeologists, historians, biblical scholars, geophysicists and scientists, who had in some way contributed to the project. Once the framework for the creation

of *Dead Sea: New Discoveries in the Cave of Letters* was established, we vowed to finish up other projects we were working on, and to begin to solicit chapters and addenda for the volume starting in early 2007. Schedules and commitments slowed the process of preparing the initial, and what has eventually evolved into what we feel is now the “final” draft of the book. It has been over nine years in the making, but the final draft of the volume was submitted to Peter Lang Publishing in 2016.

This book should be of interest to anyone with an interest in the physical, cultural and historical aspects of the Dead Sea Region and ancient Israel. The chapters contained in this volume span a breadth of research topics, yet they are linked under the banner of adding all types of new information to the existing base of knowledge about the second Jewish Revolt, and the mystical figure Shimon Bar Kokhba. Chapter topics range from a general summary of the research conducted in the cave (Chapter 1); to the physical nature of the cave, surrounding landscape and some of the important discoveries (Chapters 2 and 3); to mapping the cave (Chapter 4); using geophysics in the cave to gather data (Chapters 5 and 6); C and the microclimate of the cave (Chapter 7). The archaeology of the cave is also the focus of five chapters (8 to 12). Chapter 8 re-examines the bronze artifacts found in Hall A by Yadin; while Chapter 9 discusses the discoveries from the Niche of Skulls; Chapter 10 discusses the artifacts discovered in the BC passage in the cave; Chapter 11 the textiles, thread and cordage found in the cave; and Chapter 12, the coins. Chapter 13 discusses the date of Psalms Scroll that Yadin discovered in the cave in 1960, and Chapter 14 discusses the materials from the Cave of Letters that are displayed in the Shrine of the Book at the Israel Museum. Additionally, there are three shorter chapters in the book, which we chose to call addenda, that deal with (1) the dendrochronology of wood found in Hall B of the cave near what was surmised to be a cooking hearth (Addendum 1), (2) the Instrumental Neutron Activation Analysis of pottery shards from the cave (Addendum 2), and (3) the techniques used to break rocks in the cave, so that potential artifacts under the rocks could be accessed (Addendum 3).

We are excited that all our hard work in the cave, laboratory, and our offices has come to fruition and that *Dead Sea: New Discoveries in the Cave of Letters* is completed and in print. We feel that we have been able to compile an impressive assemblage of researchers, and writings that tell the story of our endeavors, and more importantly, shed a bit more light on Shimon Bar Kokhba, and what some of his followers were doing in the Cave of Letters. We hope you enjoy our book.

THE 1999–2001 Acknowledgements AND Summary OF Research AT THE Cave OF Letters

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The three seasons of excavations at the Cave of Letters revealed four levels of occupation in the Cave of Letters. Yigael Yadin's¹ expedition held that there were really only two levels of occupation of the Cave of Letters—Bar Kokhba era and Chalcolithic period. I have added Level 1, the modern period, since all three of our expeditions together with all of the (illicit) visits to the cave have changed the cave's environment. The four levels present from the understanding of the evidence from our excavations are:

Level 1—contains all modern material discovered in the Cave but which is from the period after Bar Kokhba to the present (135–2002)

Level 2—the Second Revolt period (132–135 CE)

Level 3—the First Revolt period and aftermath (66 CE–132 CE)

Level 4—Chalcolithic period (4,500–3,200 BCE)

Level 1: Although Level 4 is clearly represented in the Cave of Letters, we will not comment on any developments in our understanding of this level of occupation except to confirm that both Yadin's excavations and our own had remains from this period. It is clear to all us who worked in the cave starting in 1999 that illegal/illicit (unlicensed) excavations have been going on in the Cave of Letters since 1961. Bedouin visits and pilfering have been going on for the past 50 years. We have found that some of these illegal excavations must have used generators and lighting since new wiring for some lighting was found throughout the three halls. In addition, cigarette boxes and newspapers from different periods, coins and personal