

Andrews University

## Digital Commons @ Andrews University

---

The Institute of Archaeology & the Horn  
Archaeological Museum Newsletter

The Institute of Archaeology & the Horn  
Archaeological Museum

---

Fall 2010

## The Institute of Archaeology & Siegfried H. Horn Museum Newsletter Volume 31.4

Owen Chesnut

Andrews University, [chesnut@andrews.edu](mailto:chesnut@andrews.edu)

Bethany J. Walker

Missouri State University

Øystein S. LaBianca

Andrews University, [labianca@andrews.edu](mailto:labianca@andrews.edu)

Douglas R. Clark

La Sierra University, [dclark@lasierra.edu](mailto:dclark@lasierra.edu)

Kent V. Bramlett

La Sierra University, [kbramlett@lasierra.edu](mailto:kbramlett@lasierra.edu)

Follow this and additional works at: <https://digitalcommons.andrews.edu/iaham-news>

---

### Recommended Citation

Chesnut, Owen; Walker, Bethany J.; LaBianca, Øystein S.; Clark, Douglas R.; and Bramlett, Kent V., "The Institute of Archaeology & Siegfried H. Horn Museum Newsletter Volume 31.4" (2010). *The Institute of Archaeology & the Horn Archaeological Museum Newsletter*. 42.

<https://digitalcommons.andrews.edu/iaham-news/42>

This Article is brought to you for free and open access by the The Institute of Archaeology & the Horn Archaeological Museum at Digital Commons @ Andrews University. It has been accepted for inclusion in The Institute of Archaeology & the Horn Archaeological Museum Newsletter by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact [repository@andrews.edu](mailto:repository@andrews.edu).

## The Institute of ARCHAEOLOGY Siegfried H. Horn Museum



### Umm al-Jimal Project

#### Table of Contents

	Page
<i>Umm al-Jimal Project</i>	1
<i>Hisban 2010</i>	2
<i>Umayyri 2010</i>	3
<i>Random Survey</i>	4

**INSTITUTE OF ARCHAEOLOGY  
HORN ARCHAEOLOGICAL  
MUSEUM  
NEWSLETTER**

Paul J. Ray, Jr.	Editor
Constance E. Gane	Assoc. Editor
Randall W. Younker	Assoc. Editor
Owen Chesnut	Asst. Editor

The Newsletter is published four times a year by the Institute of Archaeology, Andrews University. Annual subscription price is \$7.50. Museum membership, subscription, and editorial correspondence should be addressed to the Horn Archaeological Museum, Institute of Archaeology, Andrews University, 9047 US 31, Berrien Springs, MI 49104-0990, Telephone 269-471-3273, Fax 269-471-3619, e-mail hornmum@andrews.edu.

**Volume 31.4  
Fall 2010  
ISSN 1095-2837**

**D**r. Bert de Vries, director of the Umm al-Jimal Project and professor at Calvin College, along with the Umm al-Jimal project team, presented a lecture titled “Multi-Communal Site Presentation at Umm al-Jimal” on April 26th, 2010 as part of the Horn Museum Lectureship series. The project is a multidimensional, multidisciplinary joint effort of Calvin College, Open Hands Studio, the Department of the Antiquities of Jordan, and the Department of Education of Jordan.

First, David Roukema spoke on the virtual museum and site tour. He led a team that created a self-guided site tour, updating the 30-year-old one created by Dr. de Vries. It has 34 points of interest, including the original 20, along with 14 new ones. The whole path takes 2-3 hours if one walks the entire way and reads all the signs. Themes include the flora and fauna of the area, trade, domestic settlements (everyday life), and the history of excavation. The main goal is to allow anyone to explore the site on their own, and includes a virtual tour, the use of 3-D panoramic images, text, and audio components that one can access on the web.

Paul Christians then looked at three points along the tour, focusing first on point 2, the site museum, which is a restored Umayyad farmhouse. It has a café, bookstore, and library as well as exhibits displaying the finds and history of Umm al-Jimal. Point 13 is the Roman reservoir, which has been restored to allow for local community use and in order to conserve water. The third point focuses on Umm al-Jimal within its regional context. These points attempt to show that the past isn't just about the past, but also about the future.

(cont'd. on p. 2)



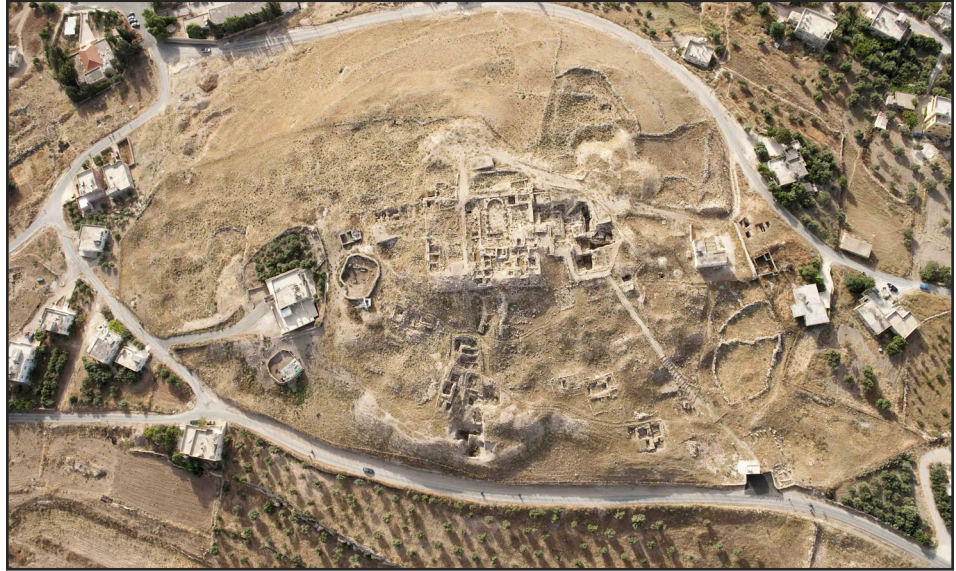
Bert de Vries (2nd from right) and the Umm al-Jimal Project Team.



Jacob Spielman spoke about virtual reconstruction. The goal of his team is to reproduce high-quality virtual 3-D replicas of some of the buildings at Umm al-Jimal, using a photographic survey technology known as dense surface modeling. It is used to create 3-D and photo-accurate representations of architectural features at the site. The surveying program or Photo Modeler Scanner takes images in stereo pairs, the depth arrived at by determining an accurate ratio between the two lenses and the feature being shot. After these photos are taken they are inputted into a program that creates the 3-D models. There are two main benefits to this technology: 1) preservation of a permanent record, and 2) worldwide study of this material.

Next, Ed Long spoke about cultural heritage. The goal here was to document the modern occupation of Umm al-Jimal, by looking at tent sites, and lintel graffiti, and interviewing locals. The team has a local translator who aids in this documentation. They take GPS points, photographs, and videos in order to thoroughly document all aspects of modern village life. This is done in an attempt to preserve local traditions and customs.

Dr. de Vries spoke on the subject of education. A main goal of this project is to teach the local children about the archaeology of the site they live around. The team started interviewing teachers and students in an attempt to determine the best way of teaching archaeology. They have brought a proposal to the Ministry of Education which has been approved. They have created a reference manual for the teachers of Jordan focusing on the knowledge they will need to teach the archaeology of Umm al-Jimal within a larger cultural/historical setting. Part one of the handbook focuses on teaching the teachers. Information includes an overview of archaeology and the history of the region, cultural periods, geography, as well as art and architecture. The second part includes lesson plans for grades 7-11. The handbook is being translated into Arabic and will be used in the Jordanian school system.



Tall Hisban.

Finally, Corrie Francis talked about the digital archive for Umm al-Jimal. This archive incorporated HD video, 3-D images, HDR photos, time-lapse photos, and other digital media that capture the site as it is. This footage is a way of preserving and protecting the site and will be incorporated to create a cohesive story line of the Umm al-Jimal project. (Owen Chesnut)



## Hisban 2010

The Tall Hisban Project returned to the field from 17 May-4 June, 2010 for a relatively brief field and study season. Fieldwork this summer concluded the Phase II excavations, which began in 1996 and have largely focused on the summit of the tell. The team consisted of 52 students and staff, the majority from two American universities, and 25 workmen from the local village.

Tall Hisban is a multiperiod, fortified hilltop overlooking the Madaba Plains, 25 km south of Amman. There is evidence at the site for over 4,000 years of occupation, from the Iron Age through modern periods. The architectural remains on the summit include the remnants of a citadel wall from the Hellenistic period, a Roman monumental building, and a Byzantine

basilica. The majority of the standing structures, however, belong to a 14th-century AD complex that included a military garrison, a bathhouse (*hammam*), and a residence for the Governor of the Balqa.

The 2010 season was designed to address very specific questions related to site history in preparation for the final publication of Phase II work. Excavation was conducted in three fields.

Three squares were worked in Field Q, on the summit of the tell. The objectives in this field were twofold: to document how and when the summit was militarized and transformed from sacred and domestic space, and to date, with more confidence, the bathhouse, a structure that is a bit of an anomaly for Mamluk-period castles in this region. This season a stratigraphic connection was finally established between the bathhouse and the Citadel storeroom that will facilitate dating the original construction of the *hammam*. A later phase of occupation (Early Ottoman?) was identified to the SW of the *hammam*, with the uncovering of a domestic structure, fronted by an animal pen and an exterior courtyard.

In Field M, two squares near the NE corner tower of the citadel were excavated. The intent here was to date and describe the function of the industrial installations on the north slope, and to map and document the use of the exten-

sive cavernous systems that underly the northeast corner tower. In this field a complex history of construction was documented, from the Roman through Mamluk periods.

In Field G, work continued in the so-called “Hardy People Cave.” This is the largest of the cave systems at Tall Hisban, and was first investigated in 1997. The aim of fieldwork here was to understand the cultural and natural processes that transformed these natural caves into massive water systems and subterranean dwellings over the course of millennia and to date the general sequences of use. The caves provided evidence for Byzantine period construction of extensive cistern systems, with occupation in the Early Islamic Period and use of cistern spaces as dumps in the Mamluk Period. (Bethany J. Walker and Øystein S. LaBianca)



## Umayri 2010

The 2010 season of excavations at Tall al-Umayri was conducted during June and July. The team of 40 participants focused on four fields, the material culture there being from the Late Bronze through the Iron Age II and Hellenistic periods.

Four squares were excavated in Field A, the objective being to expose the early Iron Age I surfaces thought to exist beneath a massive destruction layer, attested in earlier seasons. The early Iron Age I destruction seemed to be the most dramatic in Square 7J69, where nearly 1.4 m of destruction debris were cleared from the use surface. On the earlier of two phases of plaster surfaces in Building E, to the north, the remains of at least two large pithoi, a sizeable stone table and a small stone hearth were found. The relationship between the room found in Square 7J69 and the rooms in Building E is unclear at present, as the floor surface of the latter is ca. 1.0 m above the surface of the former.

The goals for excavation in Field H were to remove the large N-S wall that



Possible Four-room Building in Field H at Tall al-Umayri.

provided the western boundary of the Late Iron I/Early Iron II courtyard sanctuary, and excavation of the final earth loci attributable to this sacred precinct. In the process, an early phase of the courtyard sanctuary, before it was paved, was identified. The removal of these features allowed for excavation of the main part of the field down to the early Iron Age I phase, and for a better understanding of the partially-exposed building here.

This building seems to be constructed on a “four-room” plan, the exposure so far revealing three long rooms. On the S there is a small wall that possibly represents the N wall of a broad room, although its outer wall has not yet been found. Two poorly-preserved walls partially divide the three long rooms. The outer two long rooms were paved with cobble surfaces, the central room being a beaten earth surface. The NW doorway leads to a small domestic room, separated by small poorly-preserved walls from two other rooms to the E and W, altogether adding at least four rooms to the building. The structure appears to be domestic in nature, with an artifact assemblage including spindle whorls, stone hand grinders and hammer stones, a needle, and the carbonized remains of several seeds.

In Field L there were two main foci: to remove a series of balks in the E part

of the field in order to fully expose the Hellenistic and Late Iron Age II structures in this area, and to expand it by opening squares on the W edge of the field. Balk removal on the E part of the field exposed more of a plaster surface in the E rooms of the Hellenistic farmstead. Below it, Late Iron Age II installations were found, including a drain and a possible olive oil pressing surface. Two new squares were opened at the W edge of the field. Work here exposed a thick deposit of stone tumble and ceramic remains, but no stratigraphically-significant earth layers.

The objective for this season in Field M was the removal of the balks between the squares in order to expose more of Building A, on the SW part of the field. Balk removal revealed three phases of cobble surfaces, the 2nd and 3rd laid directly on top of one another. Surface 3 appears to be contemporary with the Late Iron Age II/Persian period occupation in Building A. A flagstone and beaten-earth surface was found in Room A1, that also dates to this time. The entrance to this room has a large set of stairs, suggesting that it is a basement structure. The stone implements found here indicate a domestic use for the structure. (Douglas R. Clark and Kent V. Bramlett)





# RANDOM SURVEY

## *Alexandrian Temple Found:*

Archaeologists have discovered a Ptolemaic-period building that appears to be a temple dedicated to the ancient Egyptian cat goddess Bastet. The temple was discovered in Alexandria, the port city founded by Alexander the Great around 331 BC. The city was the seat of the Greek-speaking Ptolemaic dynasty, which ruled Egypt from not long after the death of Alexander to the suicide of Queen Cleopatra. The temple is thought to belong to Queen Berenice II, the wife of Ptolemy III who ruled between 246–222 BC.

## *The Aqua Traiana Aqueduct Found?*

The source of a subterranean aqueduct, built by the emperor Trajan in the early 2nd century AD, which brought water to the Janiculum Hill, in Rome, has recently been discovered underneath an abandoned 13th-century church on the shores of Lake Bracciano, 35 miles north of the city.

*To discover more about archaeology, the Institute, and the Museum, contact us at:*

VOX: 269-471-3273

FAX: 269-471-3619

E-mail: [hornmuseum@andrews.edu](mailto:hornmuseum@andrews.edu)

*or visit our Web site at:*

[www.andrews.edu/archaeology](http://www.andrews.edu/archaeology)

## *Egyptian Inscription in Arabia:*

A hieroglyphic inscription of King Ramses III, who ruled Egypt from 1183-1152 BC has been found on a rock near the oasis of Tayma, in Arabia. The site was on an important trade route between the western coast of Arabia and the Nile Valley and was inhabited as early as the Bronze Age. The trade route has been used by caravans for centuries to carry goods such as incense, copper, gold and silver. Tayma is mentioned in ancient Assyrian texts dating back to the 8th century BC and is referred to numerous times in the Hebrew Bible.

## *Cuneiform Tablet Found in Jerusalem:*

Archaeologists have recently found a fragment of the oldest-known cuneiform tablet from Jerusalem, unearthed in a fill area on the Ophel. The surface area of the fragment is only 2.0 x 2.8 cm, and is 1.0 cm thick. It dates to the 14th century BC, and may have been part of the correspondence between Jerusalem and Egypt known from the Amarna tablets. It was most likely part of a message sent from a king of Jerusalem to the pharaoh in Egypt.

## *Etruscan House Found:*

The first example of a fully-intact Etruscan house has been found at Vetulonia, Italy. It dates between the 3rd and 1st centuries BC, going out of use ca. AD 79, during the wars under Lucio Cornelio Silla. The walls were made of brick and mortar with clay grout.

## N E W S L E T T E R



The Institute of  
**ARCHAEOLOGY**  
Siegfried H. Horn Museum

Andrews University, Berrien Springs, MI 49104-0990  
Address Service Requested

Non-profit Organization

U.S. Postage  
PAID  
Permit No. 5  
Berrien Springs, MI 49103