

HORN ARCHAEOLOGICAL MUSEUM

The Institute of Archaeology

MADABA PLAINS PROJECT—1989



Third Season Madaba Plains Project Participants

The third season of excavations and survey at Tell el-^cUmeiri and vicinity took place from June 21 to August 8, 1989. One hundred and thirty archaeologists, students, and laypersons from around the world joined approximately 40 Jordanians in excavating three sites in the hill region south of Amman and in conducting a survey of sites and landuse patterns in the surrounding area. Project leaders for this season included: Lawrence T. Geraty, senior project director; Larry G. Herr, director of the excavations at Tell el-^cUmeiri; Øystein

LaBianca, director of regional survey, and Randall W. Younker, director of hinterland excavations. Douglas R. Clark was the consortium director.

Tell el-^cUmeiri is about 15 km south of Amman on the airport highway and is only 300 m outside the entrance to the Amman National Park. The highlights summarized below outline the 1989 discoveries beginning with the Early Bronze Age and continuing to more recent times.

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MUSEUM SECRETARY LEAVES

Unfortunately, due to the nature of our university association, many of our staff members are students, or are the spouse of a student. Therefore, we regularly lose our staff to either graduation and/or moves away from the Berrien Springs area.

We regret to announce that Kelly Cornforth, our executive secretary, recently moved to Washington state to begin life as a pastor's wife. Fred, Kelley's husband, graduated from the Seventh-day Adventist Theological Seminary at Andrews University with a Master's of Divinity degree and has accepted the pastorate of a church.

This move came at a very inauspicious time since Kelly gave birth to a baby only a few months before their move and her friends at the museum did not have enough time to spoil little Kadie before the Cornforths moved.

We wish blessings and much happiness on the Cornforths in their new life of ministry.

HORN ARCHAEOLOGICAL MUSEUM *Institute of Archaeology* **NEWSLETTER**

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NEW ARTIST JOINS STAFF

Stefanie Elkins, a 21 year-old junior, majoring in art history and minoring in anthropology, has joined the staff at the Institute of Archaeology. Her family resides in Calhoun, Georgia and she attended Southern College for two years before transferring to Andrews University. This summer she participated in the Madaba Plains Project's Tell el-^cUmeiri excavations. After graduating, she plans on pursuing a master's degree in archaeology. Her primary interests lie in pottery reconstruction and research.

Although she is currently inking architectural and object drawings, one of her primary tasks at the Institute will be the reconstruction of pottery vessels excavated during the 1987 and 1989 seasons at Tell el-^cUmeiri.



Stefanie Elkins



Ralph Hendrix

HENDRIX CHANGES STATUS

Just this
Ralph Hendrix who for the past year has served as assistant to the curator has moved to a volunteer position with the museum. Ralph graduated from the Seventh-day Adventist Theological Seminary in June of 1989 with a Masters of Arts degree in Old Testament Studies and a minor in Systematic Theology. His thesis title is "An Analysis of Mishkan and Ohel Mo'ed in the Masoretic Text of Exodus 25-40," and is available through University Microfilms, Ann Arbor.

Since he completed his official duties at the museum Sept 23, Ralph has been preparing several manuscripts for publication, including a popular adventure novel. Here at the museum, we expect to see a lot of Ralph as he continues to assist with many of the same projects for which he was responsible as assistant to the curator.

I wrote this

DAVIDSON STUDENTS AID IN MT. CARMEL DIG

Old Testament Chair Dr. Richard M. Davidson and twelve students from Andrews University used their brains and brawn to assist in the spring 1989 season at Mt. Carmel in Israel. The Mt. Carmel Project, under the direction of Sister Damian, OCD (Dr. Eugenia Nitowski), is dedicated to the preservation, excavation, and restoration of the site of a Carmelite monastery of the Late Crusader Period (A.D. 1187-1291). The close of this period was marked by the destruction of the church. The Davidson team helped with its restoration. "Without their help we could not have rebuilt the church's entrance arch. It had been destroyed on July 30, 1291," says Sister Damian. "For two years, the staff and volunteers of the Mt. Carmel Project have hunted for arch stones, built special scaffolding, tried variations on stone placement, and patiently worked with the Department of Antiquities of Israel to receive permission to permanently set the arch in place. At last, after 700 years, the church entrance arch stands again!"



Members of the Davidson team: (bottom row l to r) Rachel Davidson, Tim Ellis, Theodore Pae, Napthali Mañez; (middle row) Dr. Davidson, Linda Johnston, Mark Swaisgood, Kris Stevenson, Audrey Folkenberg; (top row) David Vlosak, John Grys, Michael Stevenson, Robert Folkenberg.

This season marked the end of the fourth field season since work commenced at the Mt. Carmel dig in 1987 (there have been both spring and fall seasons each year). In addition to rebuilding the entrance arch, excavation continued in Area A in the "kitchen,"

first located in the fall of 1988 near the church's stairwell. Work was expanded to include four probes (Area C) as well as a probe trench (Area D) which are expected to clarify the date of the original church construction.



Constructing the entrance arch: (l to r) John Grys, Tim Ellis, Joseph Zioletti, Carl Nitowski, Mark Swaisgood, Dr. Davidson, Linda Johnston



Finds from the spring 1989 season include kitchen items: a carved water trough and a circular, basalt grinding wheel; two white marble fragments of the church's altar (one partially inscribed); several Crusader Period coins; and a large quantity of pottery and animal bones.

In addition to the Davidson team, other members of the Andrews University community who are closely associated with the Mt. Carmel Project include Dr. Robert M. Little, former professor of anthropology, and Dr. Bjørnar Storfjell, Seminary professor and ceramicist for the Mt. Carmel Project. The latter is preparing the preliminary report on the ceramics which will be forthcoming. Of course, many patrons of the Horn Museum will remember the project's Chief Archaeologist Sister Damian as Dr. Eugenia Nitowski, former assistant curator of this museum. So it is with great pleasure that the Horn Museum staff extends congratulations on this achievement of the restoration at Mt. Carmel.

Remains of ancient houses from the **Early Bronze Age** (3000-2000 B.C.) were found in Field D on the southern shelf of the tell. At least three housing compounds were uncovered. Each house included rooms for living, storage, and animal shelter. Courtyards between the rooms housed cooking hearths and storage bins. In one of the rooms parts of 28 jars were discovered, many of which held chick peas, lentils, grapes, wheat, barley, figs, and olives.

In Field F a small deposit from the **Late Bronze Age** (1550-1200 B.C.) produced a figurine of a goddess who, in ancient thought, insured the fertility of family, flocks, and fields.

The excavation in Field B continued to uncover remarkable **Iron Age** fortifications. During the **Iron I** period (1200-900 B.C.) the ancient inhabitants built a large system of fortifications that included two parallel walls surrounding the site. Laid against the outer wall was a thick layer of earth forming a rampart. Visitors to the site will see this rampart and wall as they ascend the mound from the parking lot. Perhaps in the late 11th or early 10th century B.C. the city was destroyed and approximately 2 m of fallen stones, mudbrick, and burned wood covered a room filled with storejars and other items. The fire was so hot that some of the rocks in the wall were turned to lime. The suggestion has been made that this destruction might have been caused by the army of King David during his campaign against Rabbath-Ammon (2 Samuel 11). Unfortunately, the destroyers of the town did not leave any distinct clues of their identity.

Several centuries later, near the end of the **Iron II** period (900-550 B.C.) large, expensive houses were built on the top of the mound in Field A. The basement walls of their long, narrow rooms are easily visible today, but the mudbricks that probably made up the superstructure have long since disappeared. Finds included seals and seal impressions, figurine heads, and scores of stone tools such as grinders and millstones. The occupation seems to have lasted into

the early **Persian** period (550-450 B.C.) when the city was finally abandoned.

Field B, mentioned above, also contained a unique **Roman** structure. This structure was a plastered underground pool. Few people lived at this site during the **Roman Period**. Most occupation was across the valley on the eastern hill.

The spring/well at the bottom of the tell was apparently used during all periods. The present well structure was built in the **Byzantine Period** (A.D. 350-650). Fragments of earlier well structures have also come to light, including those of the **Iron Age** and the **Early Bronze Age**.

As part of the Madaba Plains Project regional emphasis, a smaller team of archaeologists also excavated at Tell Jawa, an important site c. 4 km east of Tell el-^oUmeiri. At the base of the southern city wall about 20 javelin points, arrowheads, and slingstones were found. This evidence suggests that the town was destroyed in a major battle. Inside the wall mudbrick houses from the early **Iron II** (9th and 8th centuries B.C.) were destroyed and then rebuilt with stone. In one of the new houses a kitchen with an oven and grindstones was found. Still later a small wall was built in the style of Phoenician walls (modern Lebanon).

One of the more interesting finds at Jawa was the head of a small male figurine wearing an Egyptian-like crown. This crown is identical to those carved on several stone busts which were found in the Amman area. Siegfried Horn has suggested that these crowns were unique to the kings of Ammon. If so, it would seem that our figurine also represents an Ammonite king. This would suggest that Tell Jawa should be considered an Ammonite city on the southern border of that ancient kingdom. This conclusion is also supported by the pottery which is identical to that of nearby ^oUmeiri, where inscriptional evidence supports an Ammonite occupation. If Jawa was indeed an Ammonite city, Albrecht Alt's previous identification with Biblical Mephaath, a Moabite city (Jer 48:21-24), would seem in doubt.

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Massive walls (in foreground) enclosed the hilltop fortress of al Dreijat and provided ancient inhabitants with a panoramic view of the surrounding countryside.

Another regional excavation was conducted 2½ km south of Tell el-ʿUmeiri. Al Dreijat is possibly another Iron II Ammonite fortress. This site was remodeled during the early Hellenistic era (300-150 B.C.) when new inhabitants cleaned out the building and dug down into bedrock for their surfaces and caves.

The possible presence of an Ammonite fortress at al Dreijat in the late Iron II is of particular interest because of recent scholarly debate as to whether or not the Ammonites protected their kingdom with a solid chain of "border forts" during the early Iron age. Our findings would seem to support those who argue that these "forts" did not all exist at the same time. Some date from Iron I, others from Iron II, and still others from even later periods.

The Hellenistic pottery from al Dreijat represents one of the finest early assemblages from this period ever found in Jordan.

In addition to the excavations noted above, regional survey teams continued the work begun in previous seasons. The survey of the territory within a 5 km radius of Tell el-ʿUmeiri provides information about the ways fields and slopes surrounding the tell produced the food needed by the ancients. The regional survey was conducted by six teams.

One of the significant finds of the survey is that the inhabitants expended much greater

effort on the collection and management of surface water during Roman times than is the case today.

For example, in addition to their extensive use of reservoirs and cisterns, the Romans placed great importance on preventing erosion of soils and keeping the soil moist by maintaining terraces and embankments along the wadi slopes and bottoms. These practices enabled the Romans to produce large quantities of grapes, olives, and other fruits on slopes which today are uncultivated.

Finds from the Ottoman Period provided important insights into how people lived in Jordan during times when political conditions made intensive agriculture nearly impossible. The impression that during the Ottoman Period the population of Jordan was largely nomadic has been challenged. Although it is true that Husn, Salt, and Kerak were the only places where people lived in stone houses during this period, the survey has shown that there were many villages of cave-dwellers.

The way of life in such cave villages resembled sedentary villagers more than it resembled nomads. Typically, they would inhabit ancient tells such as Hesban, ʿUmeiri North, and Um el-Basatin where they would dwell in caves in the winter and tents in the summer. Tribes, such as the Ajermeh, are known to have lived more or less permanently in the vicinity of their fields at this time.

One survey team gathered detailed documentation of numerous ancient agricultural installations and farmsteads. Thus far, this team has been able to distinguish four types of hinterland structures: large agricultural estates, farmsteads, agricultural watch towers, and seasonal camp sites. The total number of sites identified by this team is 127.

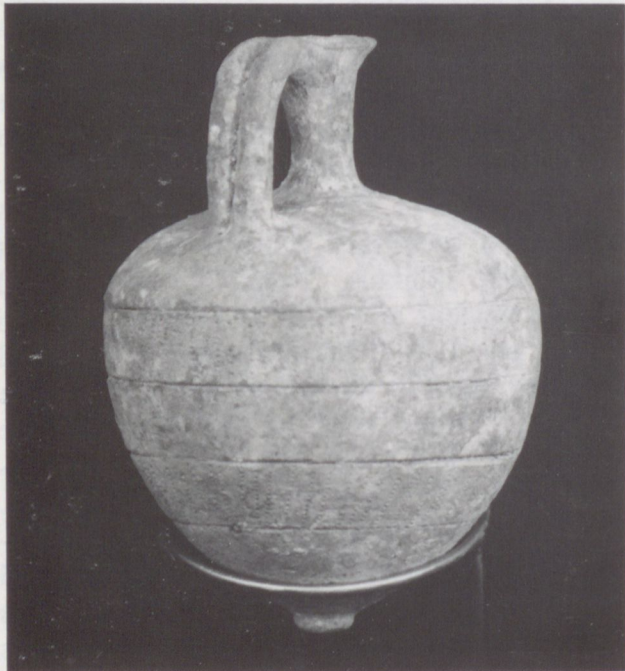
Another team examined ruins and artifacts from 100 randomly selected squares, each 200 x 200 meters in size, representing 5% of the project area. The information gathered by this team has enabled statistical statements to be made about the archaeological features and landuse patterns throughout the region. A

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significant discovery made by this team is that pottery is not only concentrated in the vicinity of tells, but it also occurs in significant quantities in the fields which surround them.

Other activities of the hinterland survey included experimentation with a ground-penetrating radar device for locating walls and chambers near the surface of the ground and studies of women's work in Ajermeh and Palestinian households.

On the whole the directors and staff consider this season to have been the best yet. The excellent discoveries from this year indicate that there is much more yet to come. Planning is already under way for the 1991 season. Perhaps, you can join us!



Tell el-Yahudiya Ware juglet.

A NEW ACQUISITION

A recent addition to the Horn Museum collections is a Tell el-Yahudiya Ware juglet.


Tell el-Yahudiya Ware is a specific type of pottery first discovered in 1906 by Flinders Petrie. The site he was excavating was Tell el-Yahudiya, an archaeological site about 20 miles north of Cairo, Egypt.

Petrie discovered Tell el-Yahudiya Ware in what he identified as a "Hyksos" cemetery, and since that discovery it has been accepted that the period of greatest use of the Tell el-Yahudiya Ware was during the Egyptian Hyksos dynasties (Dynasties XV-XVII). In the terminology of Syro-Palestine archaeology the period would be MBIIB-C, or approximately 1750-1550 B.C.

This unique pottery type is characterized by black ceramics with incised geometric patterns. Although the incised marks and color of the Tell el-Yahudiya ceramics are unique to its pottery group, the general form of Tell el-Yahudiya Ware is typical to pottery pieces of the MBII age.

The piece recently added to the Horn Museum collection is a piriform juglet with a "double-handle" and a button base. It is 13.5 cm long and 33.5 cm in circumference at its widest point.

This new addition adds an important ceramic form previously missing from our growing collection. We thank you, our many members, who made this acquisition possible by your contributions.

 Siegfried H. Horn Archaeological Museum

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