

HIPPOS - SUSSITA

Sixth Season of Excavations

July 2005



Zinman Institute of Archaeology

University of Haifa



אוניברסיטת חיפה • המכון לארכיאולוגיה ע"ש זינמן
UNIVERSITY OF HAIFA • ZINMAN INSTITUTE OF ARCHAEOLOGY

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(July 2005)

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December 2005

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Conservation of Wall Plasters and Mosaic Floors in the NWC in 2005

According to the conservation plan prepared for the 2005 season, various treatments were applied to the structures uncovered in previous years such as condition checks, consolidation of weakened or detached plaster and mosaics fragments, protection of edges, reconstruction of small *lacunae* in mosaic pavements. At the same time, the uncovering of new areas was immediately followed by emergency protection works. The team supervised by Mrs. Ewa Radziejowska was composed of Ms. Julia Burdajewicz and Mr. Jan Morzycki Markowski, students at the Conservation Department of the Academy of Fine Arts in Warsaw as well as Mr. Michał Aniszewski from Warsaw University.

1. Wall plasters

Martyrion chapel

Stabilization treatments begun in previous seasons had to be continued also this year due to the bad state of preservation of wall plasters in this room. A number of injections were made to fill blisters and voids with liquid mortar. Edges of detached fragments were also protected with bands of lime-based mortar. Two weeks of work brought about a satisfying stabilization of the wall surfaces. Fragments of plaster with remains of yellow and red paint were carefully cleaned by removing salt blooms and thick dirt encrustations with the use of scalpel and a set of synthetic gums. Shallow probes revealed an earlier layer of decoration, but further examination of the whole structure proved that only some areas were covered with a second layer of plaster and painted again. (fig. 79)

Diakonikon rooms

Plaster remains *in situ* were given the same protective intervention as that described for the *martyrion* chapel. Painted basalt blocks from the chapel stored previously in the nave were moved to the *diakonikon*. These were systematically recorded and described. After checking their condition, some plastered and painted surfaces received additional treatment such as reinforcement of edges or protection of painted surfaces by using of 3% solution of Paraloid B 72 in acetone.

Other plaster remains preserved on the steps of the *synthronon*, the columns, pillars and walls in the whole church area were given the proper protection and reinforcement where required.

Wine press

At the beginning of the third week of excavation, emergency protection work began in a newly discovered wine collection pool in the eastern part of the church's north wing. The exploration of the pool had to be accompanied by systematic preservation treatments due to the very bad condition of waterproof plasters and the danger of its collapsing.

The pool was overlaid with a thin (ca. 1 cm) layer of hydraulic plaster of a very low quality. Under the plaster one can note a thick layer (ca. 1.5 – 3.5 cm.) of very soft and weak lime-based mortar containing crushed potsherds and pieces of organic substances. This lower layer was marked with incisions that were supposed to increase the adhesive properties of the plaster. Only the eastern wall of the pool had three layers of coating instead of just two. The additional lowermost layer, of very good quality and in excellent condition was laid directly on the basalt masonry and it was hatched as well. (fig. 80)

Both layers were in a very bad state of preservation; in most places they completely lost their adhesion to the pool's walls and to each other, and remained *in situ* only owing to the support of blocks and soil slaps. Broad and deep voids were found filled with soil and small stones, small roots caused many breakings, very low quality of plaster and careless construction of the western wall of the pool seriously weakened the whole structure.

Emergency treatment included protecting the detached fragments with strips of cotton fabric glued to the surface, cleaning the voids and blisters, fixing and strengthening the edges with bands of lime-based mortar. Injections of liquid mortar were made very carefully and the process took much time due to the fact that weak and fragile plasters with large voids underneath would not be able to receive too much mortar at one time. The work in the pool was completed and had a satisfactory effect only on the steps descending into the collector. The remaining area has been temporarily protected and its condition still needs to be stabilized during the next season. (fig. 81) Poor remains of hydraulic plaster on wine press platform were also protected with bands of lime-based mortar and with filling up the gaps.

Two shallow plastered pools were exposed only on the last day of the season and therefore had to be left till next year without any immediate intervention, but the state of preservation of their plaster is quite good and there is no real danger of it sliding down. (fig. 82)

Conservation schedule for 2006 season includes:

1. Removing of temporary protection of the wall plaster in the collecting vat of the winery and completing treatments begun in previous season, such as the reinforcement of extant plaster edges with bands of the lime-based mortar, as well as the consolidation of all layers of the wall plaster by injecting the liquid lime-based mortar. Strengthening of the structure of the vat's western wall may prove to be necessary to ensure plaster stability.
2. Conservation works in two storage compartments of the wine press by applying the same treatments as those previewed for the collecting vat: the consolidation of detached fragments and the protection of plaster edges.
3. Checking of the condition of the plastered parts of walls treated during the previous seasons and, subsequently, the consolidation and strengthening of weakened or detached fragments wherever required.
4. Emergency work following exploration of new areas wherever required.
5. Recording and describing of the changes in the condition of the plaster that could have occurred since the end of the 2005 season.

Julia M. Burdajewicz

2. Mosaic floors

During the sixth season of excavation, one of the most important and most urgent tasks was the protection of the floor in the nave of the church. The work proceeded in the presbytery area as well as in the *atrium*, which was uncovered in the last season. The work in the northern annex of the church, which was exposed during this year's excavation campaign, was begun in order to protect the floor. In the rooms of the northern annex the conservation activities were conducted simultaneously with archeological researches. After finishing the archeological and maintenance work, all of the uncovered mosaics were covered with an insulating material and buried under a



Fig. 79, Hippos, NWC, the *martyrion* chapel, probes revealing remains of earlier painted decoration.

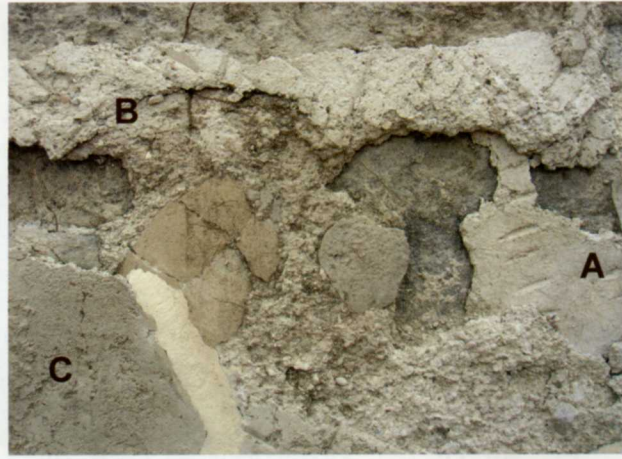


Fig. 80, Hippos, NWC, collection vat of the winery, three layers of hydraulic plaster: [A] the lowermost one of good quality, [B] thick layer containing crushed potsherds, [C] thin external coating. Note hatches on layers [A] and [B]



Fig. 81, Hippos, NWC, collection vat of the winery, steps descending to the pool. State after basic stabilization treatments.



Fig. 82, Hippos, NWC, one of two storage compartments of the wine press complex. Note the plaster coating damaged by the IDF trench.



Fig. 83, Hippos, NWC, The nave. Setting up the mortar bands has stopped the "domino effect" - i.e. the crumbling up of the tesserae and gradual decreasing of the floor area.

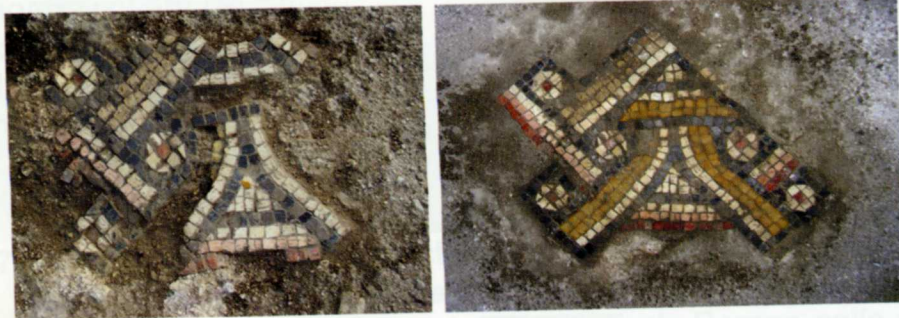


Fig. 84, Hippos, NWC, The nave. Reconstructed part of the border: a *guilloche* chain is the only fragment of the floor which has remained in the north-east part of the nave.

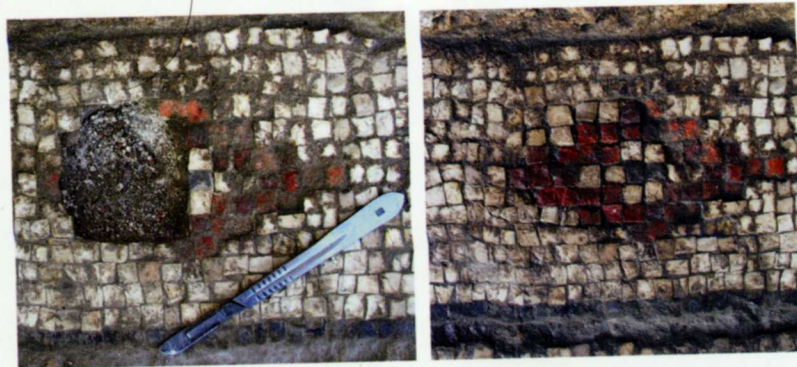


Fig. 85, Hippos, NWC, The presbytery. Reconstruction was made possible due to a clear arrangement of the *tesserae* and the recurrence of the pattern.



Fig. 86, Hippos, NWC, The northern annexe. A part of a medallion, situated in the central part of the room, was renovated.

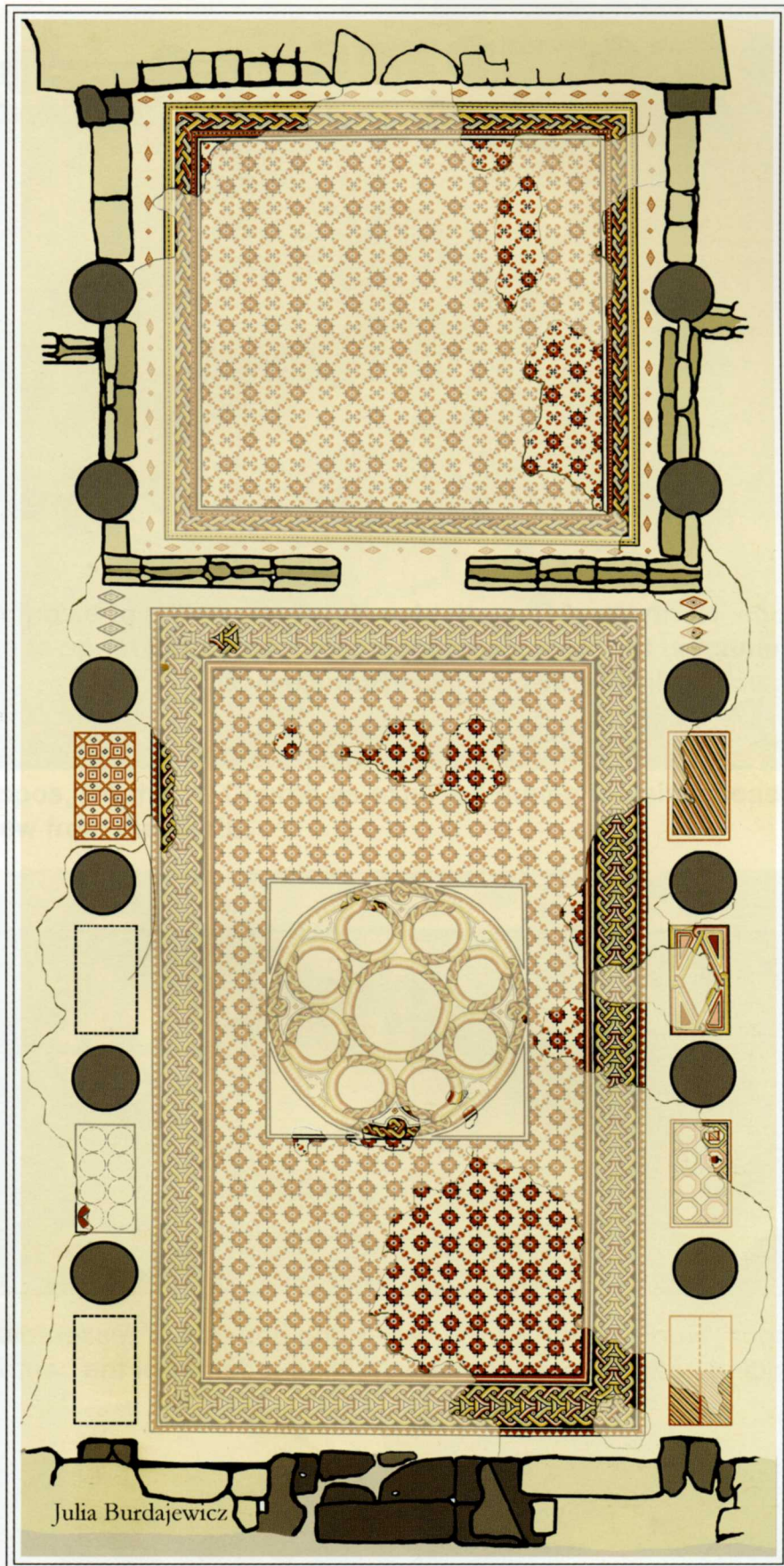


Fig. 87, Hippos, North-West Church, graphic reconstruction of mosaic carpet in the nave [drawn by Julia Burdajewicz].

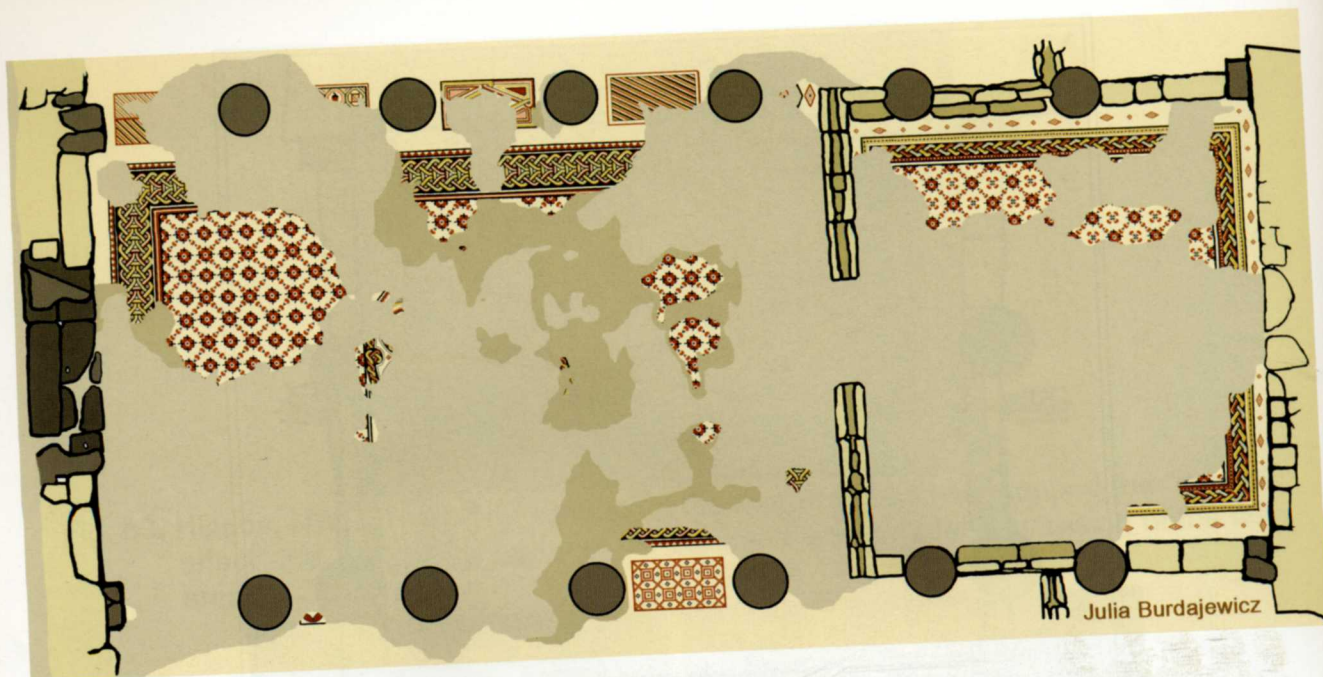


Fig. 88, Hippos, North-West Church, plan showing patches of extant mosaic pavement in the nave. Dark gray colour marks the range of preserved mosaic bedding [drawn by Julia Burdajewicz].



Fig. 89, Hippos, North-West Church, analyzing imprints of *tesserae* on the bedding of lime-based mortar: defining a corner of the central panel.