

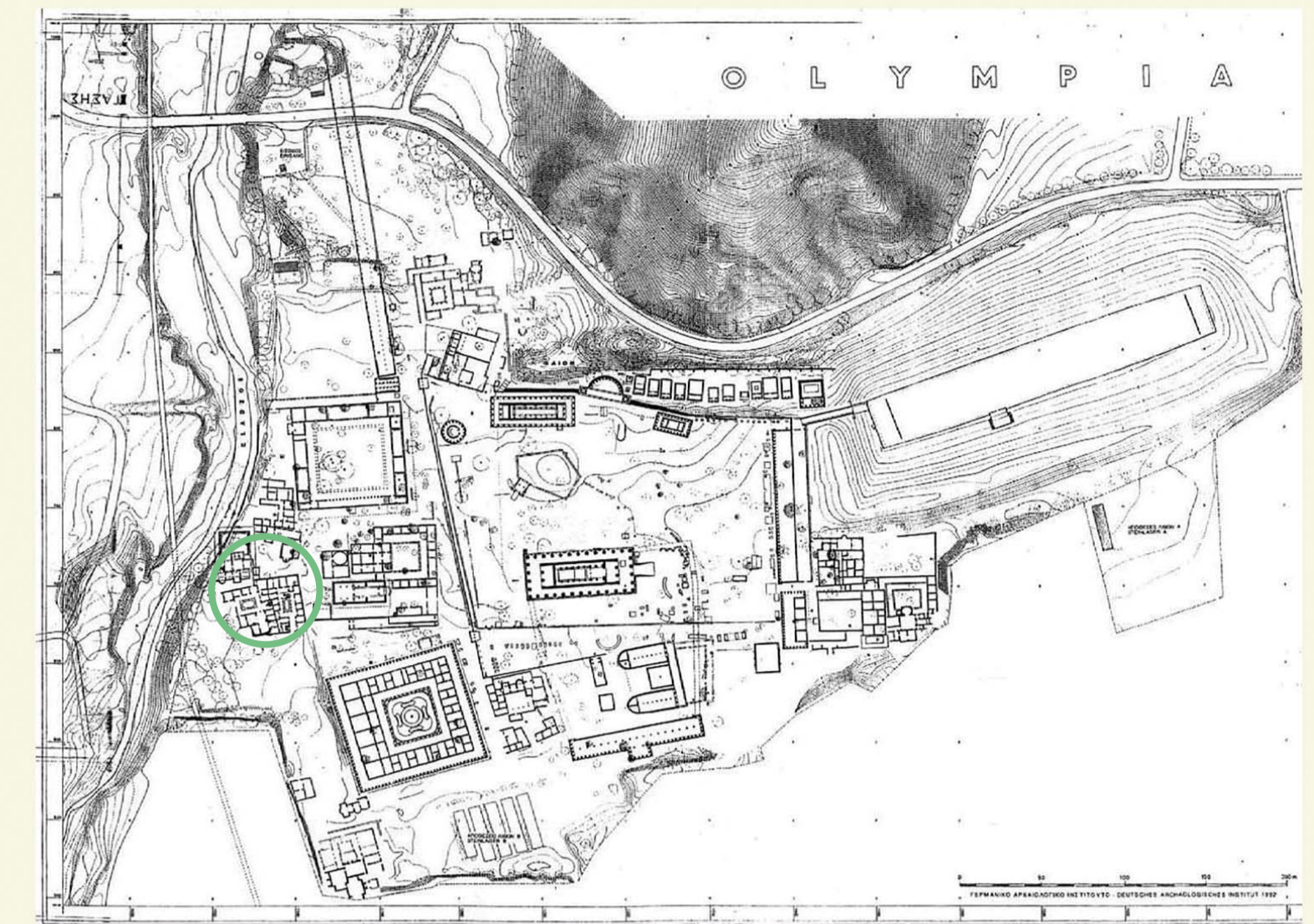


Seasonal Reburial of mosaics at Ancient Olympia archaeological site: Assessment of the new strategy Maria Krini, Kassiani Pantazidou



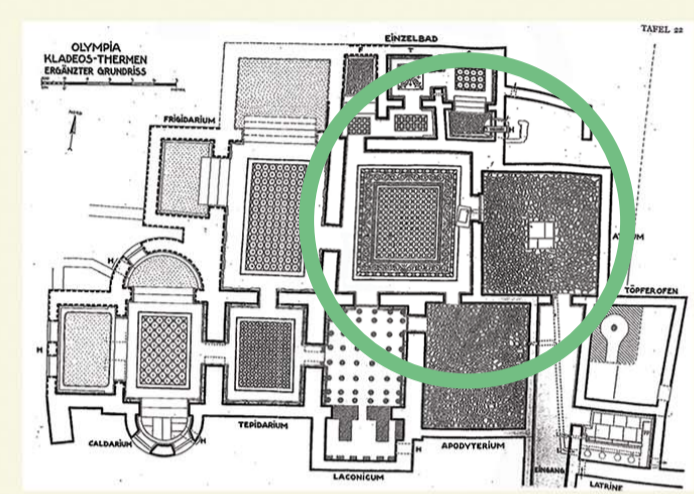
Introduction

Ancient Olympia, where the Olympic Games began, was an important religious and athletic centre in Ancient Greece. The floor mosaics at the archaeological site, their majority dated to the Roman times, measure about 650 m² and they are exposed outdoors. The complex of Kladeos baths, situated close to the banks of Alpheios river, has its floors covered with opus tessellatum mosaics with geometric patterns, constructed around 100 AD.

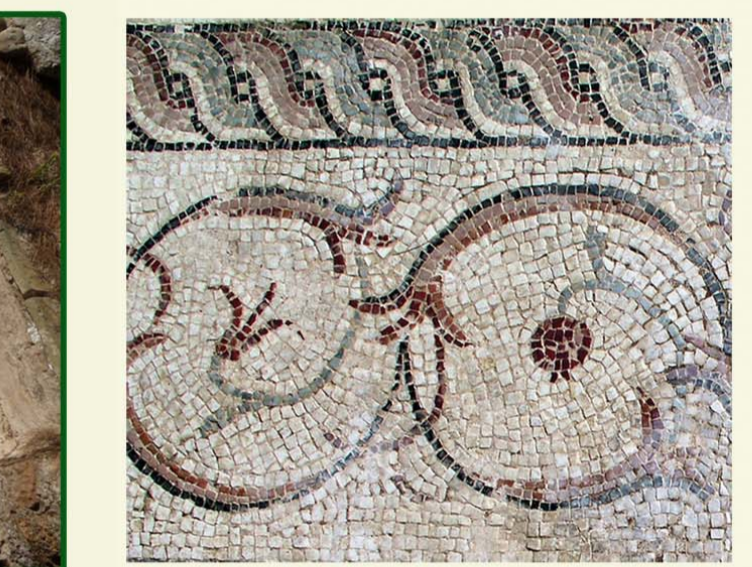


Background

The conservation of mosaics was part of the project for the enhancement of the archaeological site and it was completed in 2004. The majority of the floors were treated in situ, with the exception of mosaics with severe stability problems, like Kladeos baths complex, that they were detached, treated and relayed in new substrates and lime-based mortars. Following the conservation, and for almost a decade, the mosaics were reburied during winter and uncovered for the summer. This practice though was gradually abandoned due to lack of staff, and the mosaics were still covered throughout the year. In 2014, a new scheme for the seasonal reburial of mosaics was proposed, with a set of easier and less time-consuming covering techniques. Two floors in Kladeos baths were selected and three different methods were implemented.



Kladeos baths



Kladeos baths mosaics

Reburial Scheme

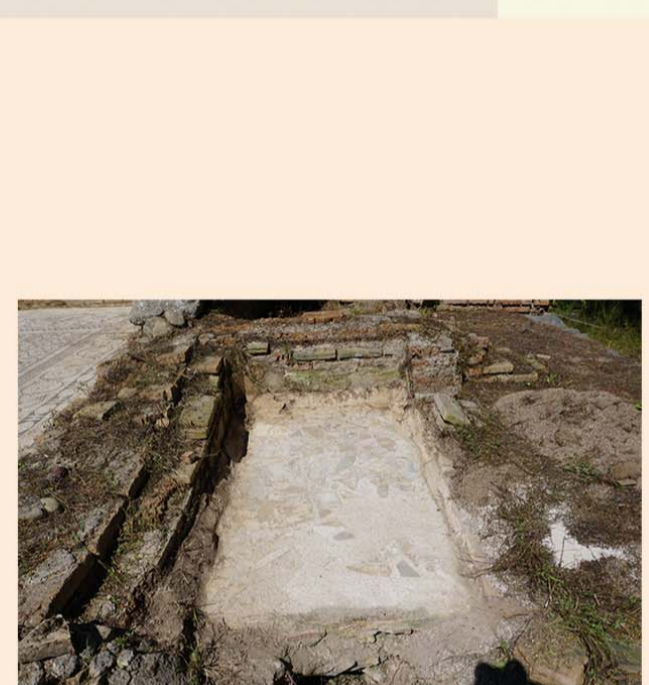
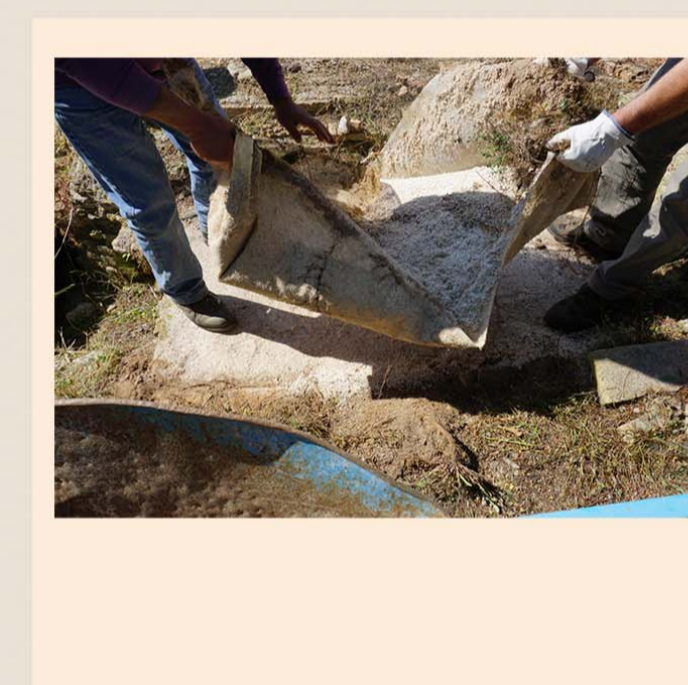
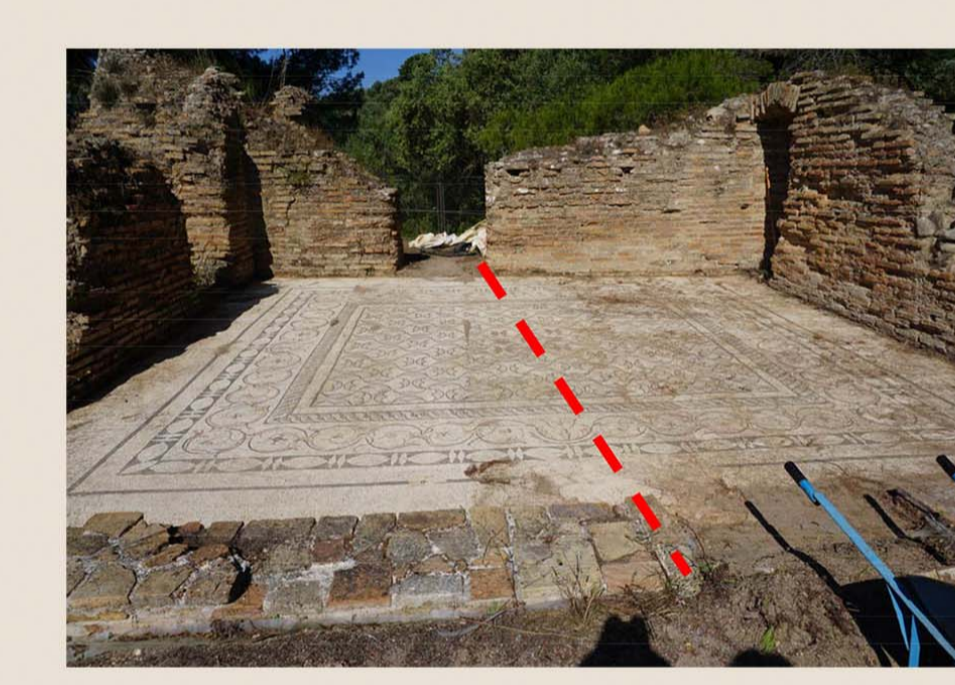
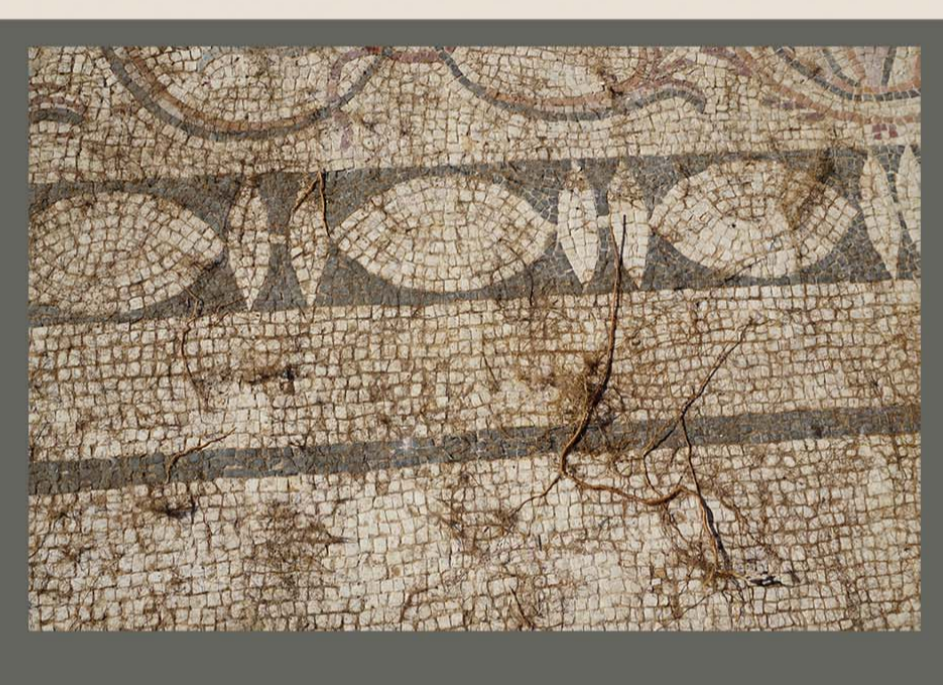
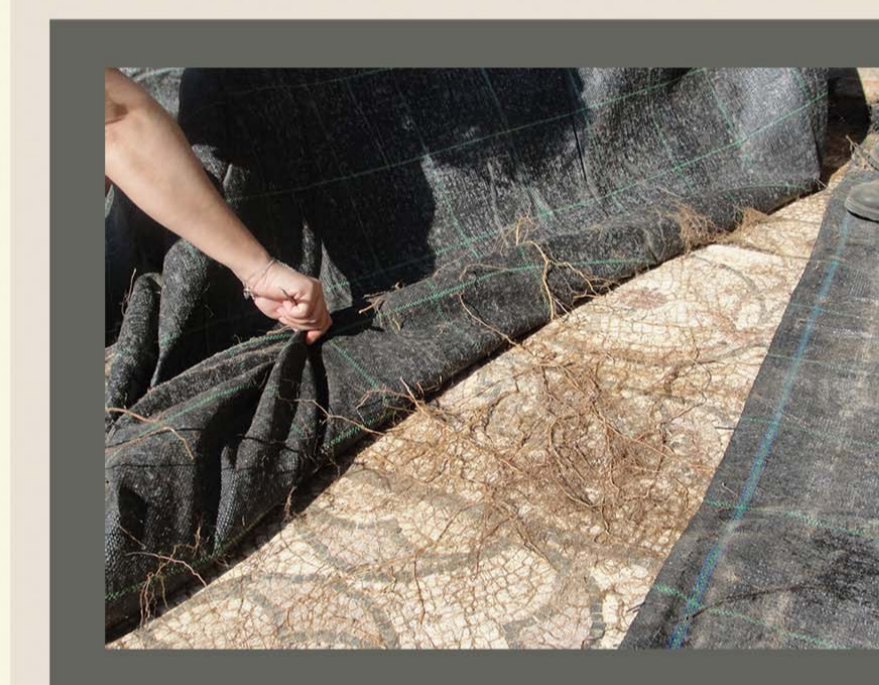
Three different reburial schemes were tested. The first was a non-woven polyethylene sheet (Tyvek® Soft) over the mosaic surface, topped with a 3cm layer of sand. The second was a woven polypropylene sheet ("Velliground" black) on the surface, covered with sand as well, with the same thickness. The above are applied to Kladeos baths' central mosaic, while the original method, a plastic net sheet in contact with the mosaic surface, a 6 cm thick layer of perlite, another plastic net sheet, and then a 5cm thick layer of sand, was applied to a small floor of the same complex. The selection of these materials was based on experiences at other archaeological sites with mosaics in Greece with similar environmental conditions, and where short-term reburial has proved successful.



Seasonal covering of mosaics, October 2014



Uncovering mosaics, May 2017



Assessment

The mosaics were covered on October 2014 and the covering-uncovering procedure was followed in 2015. In 2016 the floors stayed covered for the whole year and in May 2017 we uncovered the mosaics to assess the different materials.

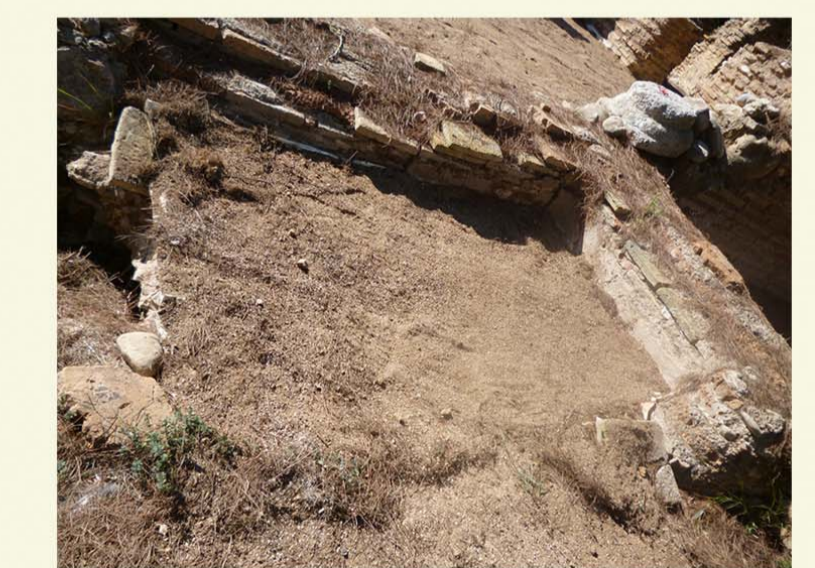
The two halves of the central mosaic that were covered with two different materials showed significant differences in their condition. Low vegetation was evident on the sand layer over the black polypropylene sheet, and in some areas the roots penetrated the sheet and intrude the mosaic. Furthermore, a thin weed root net spread over several parts of the surface, it was removed easily and it did not penetrate the mortar layers. On the contrary, when we removed the white polyethylene sheet, the surface did not show any sign of vegetation or mosaic degradation. In the third case with the perlite and plastic net, the mosaic was also in good condition. It was though more time consuming to remove the protective layers and clean the mosaic's surface.



The mosaics open for the visitors of the site

Future works

The mosaics were covered again for wintertime using the stratigraphy with Tyvek® for all exposed mosaic surfaces. The efficiency will be assessed once again next spring. For the rest of the archaeological site, the maintenance plan that was proposed in 2014 included the every year seasonal reburial of selected floors adjacent to visitors' routes, and a rotation plan for the periodic examination of the rest of the mosaics that will be long-term reburied. With this scheme the protective layers will be assessed and replaced if necessary. Moreover, replacing the top sand layer is discussed, taking though into account the significance and the aesthetic value of the archaeological site.



Seasonal covering, October 2017

Acknowledgements

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